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THE DUTIES OF A REGIMENTAL SURGEON CONSIDERED.

THE

DUTIES

OF A

REGIMENTAL SURGEON

CONSIDERED:

WITH

OBSERVATIONS

ON HIS

GENERAL QUALIFICATIONS;

AND HINTS RELATIVE TO A

MORE RESPECTABLE PRACTICE,

AND

Better Regulation of that Department.

Wherein are interſperſed many Medical Anecdotes, and Subjects diſcuſſed, equally intereſting to every Practitioner.

By R. HAMILTON, M. D.

Of the Royal College of Phyſicians, London; Member of the Medical and Phyſical Societies of Edinburgh; and of the Medical Society of London.

IN TWO VOLUMES.

ATTAMEN ERRORES NON SUNT ARTIS, SED ARTIFICUM.—Newton.

VOL. I.

ROYAL COLLEGE OF PHYSICIANS MEDICAL LIBRARY

LONDON:

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TO THE

Rev. W. SMITH, A.M. &c. &c. &c.

OF

MILBURN,

IN THE

County of ANTRIM, IRELAND,

SIR,

SENSIBLE of the many benefits I have derived from the PATRONAGE you long so generously have granted, and still continue to afford me; and of the goodness of your heart in promoting, and encouraging, as far as in your power, whatever tends to the advantage of your fellow creatures, as well as to virtue in general, I am strongly induced, both by *inclination*, and *gratitude*, to make this public acknowledgement of them.

THE connection in which you once stood to a gentleman* high in mili-

* His brother, the late Lieut. General Smith.

tary

tary rank, and to another * equally diſtinguiſhed in the practice of medicine, makes the DEDICATION of the following ſheets to you, come with double propriety; which, while they have for their *object* the welfare of the *Soldiery*, in as far as the care of their health is concerned, have ſtill kept in view *another*, not leſs important, the recommendation of the ſtudy of medical ſcience, the true baſis on which ſuch care can be founded.

THIS treatiſe then, on the *Duties of a Regimental Surgeon*, which under the ſanction of your name, is now ſent into the world, I do not inſcribe to you with the lips of *Adulation*, or thro' motives of ſelf-inte-

* His brother-in-law, the late Dr. Smith, deſervedly the firſt practical phyſician in the metropolis of Ireland.

reſt,

reſt, (the *former*, I am fully conſcious you hold in *contempt*, and the *latter*, as can be atteſted by thoſe who intimately know me, I have ever *deſpiſed*), but as the only tribute, ſmall as it may ſeem, which, at preſent, I have in my power to offer to a kind BENEFACTOR. As ſuch it is given, and as ſuch I hope you will accept it.

I remain, Sir,

With the warmeſt wiſhes for your proſperity,

And the higheſt ſenſe of your goodneſs,

Your moſt obedient,

And very humble ſervant,

R. HAMILTON.

Ipſwich, Suffolk, 1787.

PREFACE.

A VARIETY of useful, and interesting treatises have been written, especially within these last fifty years, on military medical practice, wherein most of the diseases incident to troops have been minutely described and judicious plans laid down, both for their prevention and cure; but no author has hitherto pointed out, in a more particular manner, *The Duties of the Regimental Surgeon*, or taken up the subject in the light in which it is here set forth.

IF novelty, therefore, be any recommendation, the following work has this to plead in its favour: but we hope it has more; its object is utility, while it inculcates humanity towards a class of men, whose situation,

at beſt, is but uncomfortable, and yet to whom the community are under obligations. —I mean the *Soldiery*.—At the ſame time a review is taken of the general *Character* and *Conduct* of the regimental ſurgeon, as well with reſpect to the accompliſhment of this, as to his own more comfortable ſituation.

If the author has ſometimes in purſuing his ſubject, ſpoken freely, it is not with a deſign to caſt obloquy on individuals, but thro' an ardent wiſh, that the regimental ſurgeon may become more reſpectable, and to attempt a reformation in ſeveral parts, where, perhaps, the military medical name has, in a general ſenſe, been too juſtly expoſed to cenſure.

Altho' ſeveral eminent men have been,* and are in the ſervice in the ſtation of regimental ſurgeons who previous to their engaging

* Among theſe we may mention Profeſſor Home of Edinburgh, the late Dr. Steedman, and Dr. Warburton of ditto, and many others, whoſe names reflect credit on the ſtation.

gaging in the army practice, have with credit to themſelves, and to the univerſities wherein they received their medical education, arrived at the higheſt rank in the ſcience of medicine, which the ſchools can confer; yet it is a truth too well known to be denied, that many more have, and do daily find their way into it thro' *intereſt* and mis-applied *recommendation*, whoſe opportunities of qualifying themſelves to undertake ſo important an office, have been *almoſt* none, or, at beſt, extremely limited.

It is not of the well-informed medical practitioner, ſuch as are alluded to above; but of *theſe*, I am chiefly to be underſtood as applying my remarks in the following work, who, young and inexperienced in the profeſſion in which they are engaged, and without that foundation to build on, which it behoved them to poſſeſs, may think too lightly of the duties of their ſtation, and of medical practice, becauſe they have not been taught *how* to eſtimate it juſtly, or take thoſe advantages

advantages of diſeaſe, that a more liberal education would have put in their power.

To regulate health, and to attempt the removal of diſeaſe is, ſurely, a matter of the higheſt moment to ſociety. The lives of his fellow creatures are unlimitedly placed in the hands of the medical practitioner, and a confidence repoſed in him by the public, too often on his own word, and without ſufficient teſtimonials of his qualifications from thoſe capable of judging, which in the moſt trivial branch of employment in common concerns would be denied the pretender, till ſpecimens of his abilities had been previouſly examined, and a proper eſtimate formed how far he was initiated in the principles of the branch he propoſes to follow.

Does any man truſt a perſon who calls himſelf a *taylor*, a *ſhoemaker*, a *carpenter*, &c. &c. to make him a coat, a pair of ſhoes, a door for his houſe, &c. without firſt having known ſomething of his capacity in the buſineſs

buſineſs in which he means to employ him? —Before the carpenter can ſet up for himſelf in his buſineſs, cuſtom ordains, and the laws give it countenance, that he ſhall be regularly bred to the trade, and a ſpecified term of years, is for the moſt part, fixed to be allowed him for this end; ſhort of which is not thought competent for obtaining a proper ſkill in the handy-craft, to give him pretenſions to the name he would aſſume.

Is it not ſtrange, that the ſame pains ſhould not be equally exerted in a matter of ſuch magnitude as the employment of medical practitioners?—The one at moſt can only ſpoil you a piece of labour, and coſt you nothing but its price, which your purſe may eaſily afford to repair, while the unqualified man, who uſurps the medical character, and incautiouſly deals out his drugs, poiſons when unſkilfully applied, *may*, nay often, we fear, *does*, rob you of the life of your deareſt concerns, your friend's, your child's, your wife's, or perhaps your own, for ever beyond

beyond the power of reparation.—Such is a melancholy picture of our credulity, in theſe nations; but ſuch is truth!

THE innumerable ſwarms of quacks, and medicaſters, which, to the diſgrace of the laws of Great Britain and Ireland, beyond all other civilized and poliſhed nations, that daily abound, clearly evince, the above reflection, ſevere as it may ſeem, is but too well founded.*—The noſtrums ſold in every ſhop, and puffed off in every newſpaper; the empyrics that daily ſtand in our ſtreets, and infeſt the neighbourhood with the moſt barefaced aſſurance, deluding the incautious and credulous multitude, robbing them of that which ſhould buy them food and clothes, and promiſing them health, which they cannot beſtow; and which a little time proves, that their impudence, and their deſign to cheat, were the ſole motives by which

* While I am writing this, one of theſe Impoſters ſtands in our ſtreets, raiſing large contributions on the credulous multitude.—Let truth, and his works ſpeak his Eulogium.

which they were actuated.—Let theſe, I ſay, ſtand forth, and declare how far the remark is founded in juſtice!

It was the ſerious conſideration of this ſubject; I mean, the importance of the truſt repoſed in the medical character, whether in a ſettled ſituation, or in the leſs ſtationary condition of a military practitioner, that firſt gave riſe to the remarks contained in the following pages. Several of them, there is reaſon to fear, are not more applicable to the army practice, than to many ſettled practitioners, loaded with the miſplaced confidence of the public, in various towns and villages throughout theſe kingdoms.

The obſervations I have ventured to make on that which is the chief purport of this publication, are drawn from minute attention to the ſubject. For my ſituation unavoidably afforded me many opportunities, notwithſtanding my ſtation was confined,

and

and my ſervices limited to a few years only during the late war.

WHETHER I have ſpent my time well, or otherwiſe, in collecting them, the public muſt judge. This I can with the utmoſt veracity declare, whatever may be their reception, that my aim was *utility*, and my principle motive, the good of thoſe for whom I have taken up my pen.

IT remains only now, that I return thanks to thoſe who have generouſly encouraged the publication.* It was by their promiſe of ſupport, tho' it muſt fall ſhort of indemnication of my expences, as the number of ſubſcribers is confined, that determined me to publiſh. But emolument alone, on any occaſion, has never been my chief motive; and was it even ſo here, it could not ariſe from a work, the ſale of which, from the nature of the ſubject, and the claſs of men to

* Vide the liſt of ſubſcribers, Vol. II.

to whom it is chiefly adapted, cannot be very extenſive. Yet I have taken what care was in my power, in the courſe of my illuſtrations, to interſperſe it with medical anecdotes, &c. as well to render it, in ſome degree, fit for the peruſal of other practitioners beſides thoſe of the army, as to explain more fully the different ſubjects which offered themſelves to my conſideration.

It may appear to ſome, that I have often dwelt too long on minutiæ; but they will pleaſe to obſerve, that what may ſeem trifling to the ſettled practitioner, may be matter of much importance to the regimental ſurgeon; there is no occaſion to illuſtrate this at preſent; it will be evident to the reader when he conſiders the regimental ſurgeons ſituation, and if he can but for a moment ſuppoſe himſelf in it.

I HAVE endeavoured to ſhow, that the regimental practice partakes almoſt *entirely* of that which is allotted to the phyſician;

hence will appear the propriety of inculcating to him the neceſſity of a liberal education to diſcharge his duty with *fidelity*, nay, with *innocence*, and without *criminality*. I have treated pretty fully and freely on the ſubject of intoxication. For this I hope I cannot incur cenſure, when the daily conviviality of a military life is conſidered, and the danger then of adminiſtering medicines, ſhould ſome unguarded hour of hilarity induce this condition.

My cautions on the careful doſing of medicines may in like manner be thought ſuperfluous; but I would hope, that on reflection, it will not only eſcape condemnation, but be thought a proper ſubject to be handled in a work of this nature.

The utility of experiments when conducted with care and prudence, muſt be obvious to every one; and I flatter myſelf no apology will be thought neceſſary for inculcating an attention to this part of the practice

tice of medicine. What I have ſaid relative to the medicines to be kept in the medicine cheſt, may be conſidered as more exceptionable: I confeſs it is far from perfect; but I have given a ſketch of ſuch as I have, from time to time, uſed, or which I ſhould have had recourſe to if they had been in my poſſeſſion; for it is not always we are well provided. But for this imperfection, I muſt rely on the medical reader's benevolence to excuſe, and the army practitioner's ingenuity to ſupply.

ADVERTISEMENT.

WHEN the following work was propoſed to the public, it was ſuppoſed it might be compriſed in one volume of about 400 pages; on purſuing the ſubject, however, in the order then mentioned in the propoſals, it inſenſibly ſtretched conſiderably beyond the limits of an ordinary volume. Without treating more conciſely on each head than the author thought would place his ſubject in a clear light, it was impoſſible to ſtop here: he therefore deemed it more expedient to divide it into two ſmaller volumes, than to give it in one of a thicker and leſs convenient ſize. Tho' the expence incurred is hereby conſiderably greater, yet the price to ſubſcribers ſhall not be augmented.

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The Duties of a Regimental Surgeon, &c.

CHAP. I.

Introduction.

It is an old remark, and, I fear, not the leſs true for its antiquity, that more men periſh in the regimental practice from the want of proper medical care, than by the ſword; or, in the words of an ingenious author, "More die there by the lancet, "than the lance."

If this be true, it is ſurely lamentable, and what concerns the ſtate not a little, ſince the reformation, if any is ever to take place,

muſt, in a great meaſure, proceed from thence. New regulations muſt be made in the Surgical department, and better encouragement held out for the performance of this part of the public ſervice to thoſe who engage in it.

It is with ſome degree of diffidence I venture to throw together a few thoughts on the ſubject. I wiſhed to have ſeen it undertaken by ſome other better qualified for the taſk; but, ſince none has as yet appeared to plead the poor ſoldier's cauſe in this reſpect, I ſhall make the attempt. Others, perhaps, may be induced to follow the path, and turn their attention this way, whoſe abilities in ſtating, as well as opportunities of knowing facts, may juſtly give them pretenſions above me.

But it will ſtill be a ſufficient ſatisfaction, if I can become the agent, though in ever ſo humble a degree, or diſtant point of view, in removing a common evil, and pro-

producing ſome public good. The few years, however, I have ſerved in a military medical capacity have furniſhed me with ſome opportunities for obſervation on this head.

I WOULD not wiſh in theſe remarks deſignedly to drop any expreſſion that could give offence to a ſingle individual. Far be ſuch a diſpoſition from me! at the ſame time, I ſhall point out with fidelity, and without fear, whatever appears to me capable of improvement, as far as my knowledge of the ſubject reaches. The ingenious and liberal-minded ſurgeon will applaud, not blame me. The approbation of men of this diſpoſition I ſhall always be ambitious to obtain.

EACH regiment, as well militia as regulars, is allowed a ſurgeon, as he is termed, and ſurgeon's mate. Their buſineſs is to attend to the diſeaſes of the men at all times whenever it is judged neceſſary. For this

ſervice

ſervice the ſurgeon is allowed four ſhillings a day; the mate three and ſixpence. But, out of this are levied from them conſiderable duties: to pay theſe, daily ſtoppages are made, for ſuch is the cuſtom of the army: from the ſurgeon a ſhilling, and from the mate ſixpence a day. This makes their ſubſiſtence equal, ſo that each is limited to a guinea a week, and on this they muſt ſubſiſt as well as they can.

These ſtoppages, however, amount to more than the duties, but the overplus, or clearings as they are called, are never regularly returned at the end of the year. Inſtead of this, it moſt commonly happens, that the clearings of the firſt year's ſervice are not paid till after the third, and ſometimes even later. When they are moſt regularly remitted, it is never ſooner than after the ſecond year. The ſtoppages ſubſtracted from the ſurgeon's pay amount to about five guineas a year, and thoſe from the mate ſomewhat leſs. Some of theſe are for uſeful

ful and laudable purpoſes, and are not to be regretted: others leſs ſo, and ſhould not exiſt.*

THE ſurgeon and mate are exempted from all duty, as it is called, in the army; ſuch as mounting guard, attending court-martials, and ſuch like; their charge alone being confined to the ſick. They rank as ſtaff-officers, and are conſidered as an appendage to the corps. In the line of actual ſubordination the ſurgeon ranks not only below the youngeſt enſign, but the quarter-maſter and adjutant; and the mate again below the ſurgeon.

THE ſurgeon receives a commiſſion ſigned by the ſecretary at war, or, if abroad, by the commander in chief there, who has authority to grant it; the mate only a warrant ſigned by the colonel of the regiment into which he is about to enter. This ſubjects him

* I MEAN here the fees of clerks beyond their juſt poundage.

him to ſome inconveniencies from which the ſurgeon is exempted by having his commiſſion from a ſuperior power. But of this we ſhall ſpeak hereafter.

The ſurgeon or the mate muſt be preſent at all regimental puniſhments, *i. e.* at all times when any of the privates are, for certain miſdemeanors, ſentenced to be flogged. Their buſineſs here is to watch the ſuffering delinquent attentively, and to order him from the halberts whenever he is thought in danger, whether the ſentence of the court-martial be altogether executed on him or not. In this the commanding-officer has it not in his power to controul him, if he thinks it expedient to aſſert this right of opinion and authority.

The ſurgeon and mate are obliged to attend field-days; their buſineſs in the field is to give aſſiſtance ſhould any accident take place. For it ſometimes happens that the men cut their hands with the flints on firing

firing their muſkets; ſometimes with the bayonets, in the hurry of returning them in keeping their motions; and ſometimes over fatigue renders them unable to finiſh the exerciſes of the day, and ſuch like; when it becomes their buſineſs to ſee them taken care of.

Every regiment has an hoſpital for its ſick, provided a houſe for that purpoſe can be procured in the place where they are quartered. To defray the expence of this, government allows about thirty pounds ſterling per ann. in ſome regiments. I believe, indeed, this is the allowance in moſt. If there be any overplus, it is applied to the purchaſe of wine for the ſick, utenſils for the houſe, ſuch as diſhes, ſpoons, chamber-pots, &c. Out of this, ſixpence a day is alſo paid to a nurſe in ſome regiments, an indiſpenſably neceſſary ſervant for an hoſpital.

To ſupply medicines, each private pays a penny a month; each non-commiſſioned officer a penny three farthings: the non-commiſſioned officers I call the drummers, corporals, and ſerjeants. At the late war eſtabliſhment this amounted to about eighty pounds nine ſhillings and ſixpence per annum in ſix hundred and thirty-ſix rank and file. The preſent peace eſtabliſhment reduces it in ſeveral regiments about ten pounds.* The amount per man, however, is the ſame, though the mode of collecting it has lately been changed. In the regulations of the army, printed in 1783, we find this alteration is made, viz. that in a regiment now, whoſe companies are at fifty men or under, ſeventy pounds a year is

* I AM uncertain whether the peace eſtabliſhment of every regiment of foot be reduced to an equal ſtandard. As the full complement in time of war was different in different regiments, the peace eſtabliſhment may be likewiſe different. In a regiment of 636 rank and file, with the non-commiſſioned already mentioned, the peace eſtabliſhment has reduced them to 400.

is given to the ſurgeon in place of pence-money, and in regiments of a greater complement a proportionably larger ſum. Beſides this, when the regiment is encamped, government ſends him a cheſt of medicines as an addition to the medicine money.

THE complement of many regiments in the late war among the regulars, was ſix hundred and thirty-ſix privates, forty-eight corporals, twenty-ſix drummers, and thirty-ſix ſerjeants; amounting in all to ſeven hundred and forty-ſix. With reſpect to the ſea ſervice I am entirely unacquainted; therefore, it is to be underſtood as exempted from any remarks in this eſſay.*

I SHALL now ſtate the number in the ſick report of a regiment of the above complement at one hundred men, one day with another. But we are to obſerve, it ſeldom happens that it is compleat. It is as fre-

 quently

* IT is to the foot ſervice I chiefly confine myſelf.

quently found with leſs than the half; and, perhaps, at an average, for twenty years, we might ſtate it at this. We are to remember, however, that out of this hundred men returned to the ſurgeon, not one half, one week with another, actually require any medical aſſiſtance whatever. For it is the mode of proceeding to put all that are found unfit for duty, whether they are ſick or not, into the ſurgeon's liſt. Such men being in the number of the regiment, and receiving pay, muſt be accounted for; and there is no other place to arrange them in daily returns to the commanding officer, or thoſe to the War-office, ſo convenient as this.

If, then, it be allowed, that, at an average, the complement of the regiment being compleat, as already mentioned, a ſurgeon has never more than fifty men to viſit daily, his fatigue cannot be ſo great, when at the ſame time we conſider, that even out of this number, cut fingers, and trifling blotches on the legs, not to mention ſome that want ſhoes,

ſhoes, and others that want other neceſſaries, form, perhaps, one third of them. But ſhould the regiment not be even half compleat, following the ſame proportion, his patients are reduced ſtill to one half leſs; ſo that, at an average, they are not above twenty-five.

It will hence appear, that he has leiſure ſufficient to pay proper attention to the really ſick; to reflect on the nature of their diſeaſes; to weigh the ſymptoms; to turn over authors who have treated on the ſubject; to compare it in his mind with ſimilar caſes he has met with in his practice; to obſerve the exact effects of the medicines exhibited; and to change or continue them as the caſes may require.

Those who attend the ſick in large hoſpitals, not only in general viſit a much greater number of ordinary houſe-patients daily, but over and above attend, perhaps, an extenſive private practice. It is the diſtance, for

for the moſt part, that our patients dwell from one another, that cauſes the fatigue of the profeſſion, not their number when placed under one roof, as in an hoſpital. Hence the ſurgeon of a regiment can have very little cauſe to complain of great fatigue, whoſe number of patients, by our calculation, which is rather above than below par, are ſo few; and, if not in his hoſpital, are within the limits of a town, perhaps, comprized within the ſmall compaſs of a mile; but ſhould it be even three or four, to viſit them can never be ſaid to engroſs all his time; and, more eſpecially, when the duty is divided between him and the mate, on whom the greater ſhare of the buſineſs generally falls.

The reaſon why I have entered into this diſcuſſion, and pointed at the limited number of ſick in a regiment, will appear in another part of theſe obſervations, where it ſhall be our buſineſs to ſhew, in as clear a light as poſſible, that the appointment of mates

mates is unneceſſary; and that, by a different regulation, wherein they ſhall be altogether excluded, the regimental practice may be better attended to; and not only that, but the office of a regimental ſurgeon gain more reſpectability.

CHAP.

CHAP. II.

Of the Difficulties attending a Regimental Surgeon's Station.

AFTER what has been premiſed, we ſhall now enquire a little into ſome difficulties which a regimental ſurgeon has to encounter in the right diſcharge of his duty. Theſe indeed we ſhall find by no means few, and if he be a man of a humane and tender diſpoſition, are ſuch as will cauſe him many hours uneaſineſs and diſquietude.

FOR ſurely it is matter of great concern, and muſt preſs not a little on our feelings as men, to ſee a poor unhappy patient deſtitute frequently of almoſt every thing fit for his ſituation; deſtitute of a proper bed to lie on; deſtitute of lodgings properly ſuited to his preſent diſtreſs; deſtitute of proper

proper food or cordials to ſupport nature in its languiſhing ſtate; and, in a word, deſtitute of almoſt every thing which he ought to have, which his preſent diſtreſs loudly calls for, and which are often abſolutely and indiſpenſably neceſſary for his recovery.

That this is no exaggerated deſcription will appear evident, when we conſider the houſes the ſoldiers are billeted on; and the manner in which they are often uſed in towns where the regiment is quartered, when hoſpitals cannot be hired.

The billets in England, and, I may add, in Scotland, are always in public-houſes; and the landlord never fails to look on the ſoldiery not only as a nuiſance, but as a great drawback on the profits of his buſineſs. They are treated coldly, and frequently lodged poorly. The places alloted for them are generally ſome uninhabited garret or lumber-room, where the very air they

they are obliged to breathe is ſo vitiated, as, at firſt entrance, conſiderably to affect a perſon unaccuſtomed to it.

If the landlord has no garret, he has, perhaps, ſome backhouſe, where he erects a few dirty beds. Such places are ſet apart for the ſoldiers, becauſe fit for no other uſe. The clothes on their beds are frequently ſo ſcanty, and ſo much worn, as even in ſummer to be almoſt unfit to keep them warm, and ſhould it happen to be cold winter weather, altogether inſufficient. This often brings on catarrhal affections, and lays the foundation of other more violent diſeaſes of the inflammatory kind, not unfrequently ending in death.

It muſt be obvious that this will affect the ſurgeon in his practice; for, we need not add, that while the cauſe exiſts, the diſeaſe muſt continue. The moſt judicious plans of practice may be laid down, but, under ſuch circumſtances, it will be

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next to impoſſible they can prove ſucceſsful.

That this is a true ſtate of the fact many a poor ſoldier can teſtify, and, on my profeſſional viſits to them, what I have too often had occaſion to lament: the more ſo, as it was not in my power, in this reſpect, to afford them relief. The truth is, that many a priſoner in his cell is better lodged than we find many of the ſoldiery in billets; yet will they ſeldom complain, if their ſituation be at all tolerable. If complaints, indeed, are made to their officers, redreſs, as far as can be had, is given. A meſſage is ſent to the billet-maſter to deſire him to change the billets of the ſoldiers ſo treated; or oblige the publicans to furniſh them with better accommodations; but this is ſeldom productive of much good: for ſhould the magiſtrate interpoſe, which ſometimes is the caſe, and the landlords be reprimanded, perhaps fined, and thus compelled to give them better uſage, ill-nature

generally takes place on both ſides; the landlord and his family ſtill prove haughty; the ſoldier retorts it by behaving improperly, and taking every ſtolen opportunity of committing miſdemeanors. Thus neither party is pleaſed. The landlord abuſes the ſoldier—the ſoldier the landlord. Thoſe neceſſaries with which he is obliged by law to furniſh the ſoldier, are not only given with reluctance, but are often of the worſt quality.

THEIR ſmall beer is what I have chiefly now in view; for on theſe, as well as many occaſions, it is generally vapid, and unfit to be drank. Hence it frequently becomes the cauſe of cholics, diarrhœas, and other complaints of the bowels, that prove not a little troubleſome to remove; and cannot be completely cured till the cauſe ceaſes, and a change is made in this article, which is not always in the power of the ſurgeon to accompliſh, and who can only attempt a remedy by a complaint to the officer, which

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as often fails of the end in view, as it obtains it.

We muſt acknowledge, that the publicans are greatly oppreſſed, eſpecially in time of war, by the military. It appears very unfair to burthen this claſs of his Majeſty's ſubjects with ſo heavy a tax, while all other deſcriptions of men are exempted, and while they at the ſame time pay their juſt proportion of the other taxes of the ſtate. I ſpeak here of Great Britain; it is different in Ireland; the diſtribution of billets there is more equal: private houſes as well as public are ſubject to them.

With reſpect to the publican, he ſurely has no profit by a ſoldier's cuſtom. Such as hold this plea, have built their reaſons on a wrong foundation. His pay, it is well known, is barely ſufficient to purchaſe him neceſſary food. Let me ſuppoſe each ſoldier ſpends three-pence daily in his landlord's houſe, which is half his full pay, even this

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is no equivalent for the trouble and expence he proves to him. I believe, however, it will be readily granted, this is a ſum no private ſoldier can afford to ſpend.

THAT ſoldiers frequently get drunk, I acknowledge,; but this is not always at their own expence. They are often jobbing through the town, when not on duty; their wages for this is ſometimes a pot of beer, or the like: this may or may not be at their billets, juſt as occaſion ſerves, or as the landlord has a job for them.

I REMEMBER to have heard a publican declare, that his ſoldiers (I have forgot the number he had billeted on him) coſt him no leſs than thirty pounds ſterling a year in ſmall beer alone.* Let us ſtate it even at half,

* I HAVE been in inns in the Weſt of England where 52 ſoldiers, and ſome officers, were billeted on an innkeeper at once: not for a night, on a march, but for a continuance. If each of theſe was paid out, at 1s. a week, it would amount to 2l. 12s. weekly; but,

half, and it is ſtill a heavy tax; and when we conſider, that they are furniſhed with other neceſſaries likewiſe, it becomes a farther oppreſſion. This man kept a large inn. Small public-houſes are, however, proportionally burthened. In a country ſuch as near London, where fire-wood and coals are dear, the article of fire itſelf is no ſmall tax during the winter. This the ſoldier is allowed, and this he will have, if poſſible.

It has appeared to me ever ſince I knew any thing of the army and its cuſtoms, that there are other deſcriptions of men on whom juſtice would equally require ſoldiers to be billeted. The butcher and baker I have chiefly now in view. Theſe receive more of the ſoldier's pay than the publican: for the ſoldier *may* drink, but he *muſt* eat. It will not be an over rate if I ſay, a ſoldier's bread

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but, from 1s. 3d. to 1s. 6d. is a more common price in thoſe parts, when ſoldiers provide themſelves. This is an enormous tax: it is, however, in times of war that publicans are ſo burthened with them.

bread and butcher's meat ſtands him in two ſhillings and two-pence a week, *i. e.* half a pound of meat a day at two-pence, which amounts to one ſhilling and two-pence a week; and three halfpence a day for bread, which is ten-pence halfpenny. I might rate it at two ſhillings and four-pence a week. The price that the lower public-houſes board their ſoldiers at (for ſome do board them) is four-pence a day. This is much more than a publican gains by a ſoldier. If this be true, it follows, that butchers and bakers, having equal, if not ſuperior gains by the military, ſhould be equally ſubjected to the tax of billets.

But there are inconveniences yet remaining that attend ſoldiers always billeted in public-houſes, and obliged to live there: I mean the temptation to drink. We know, indeed, they will drink whether they dwell in public or private houſes; but in the former the temptation is greater than in the latter; for, being ſo convenient, if they have

have a penny they will ſpend it in liquor, though they ſhould not poſſeſs another to buy them bread.

In a butcher's or a baker's houſe theſe temptations would be leſs; and another advantage, I apprehend, would follow: they would be leſs liable to contract debts. For though the military laws be ſo ſtrict as to oblige the commanding officer, on coming into new quarters, to ſend a drum round the town to cry down the men's credit, beyond a day's pay, and this on pain of being caſhiered if he neglects it, yet many of them find means to get more credit than they can diſcharge. The conſequence is, that on leaving the town they leave behind a bad name, and are the cauſe of bad uſage to thoſe that ſucceed them; but this is not all—this very thing is the cauſe of deſertion.

For ſhould their debts be diſcovered to the commanding officer, and they put on ſtoppages for the purpoſe of payment, the pittance

pittance they now receive being inſufficient to purchaſe them meat, they are, I may ſay, forced to deſert; they cannot ſtarve; the cravings of nature muſt be ſatisfied.

But it is not the private alone that is the ſufferer by conſtantly living in a billet; the officer is in like manner ſubject to the ſame. He experiences many inconveniences from it: he muſt buy his food at almoſt double the ſum he would pay in a private family; for he muſt pay at the common rate of the traveller, who, it is well known, pays double the value of every article he needs, while on his journey. This is exactly the ſituation of the officer. If he is frugal, he will receive bad treatment; at leaſt neglect will be his lot; and ſhould he expend even double his ſubſiſtence, he will ſeldom receive from the maſter of an inn over civil treatment.*

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* The publicans ſometimes tell the officer, that by his cuſtom they expect to be reimburſed for the expence and trouble of the ſoldiers billets: this I have myſelf been told.

In a private houſe he would, in a great meaſure, be exempted from this; his room or billet would, in all probability, be more commodious, and his board would ſtand him in conſiderably leſs, provided he choſe to eat at his billet. To a ſubaltern this is no ſmall conſideration. But I have dwelt long enough upon this head. I ſhall now return to the farther conſideration of the difficulties attending a ſurgeon's practice when the privates are in billets.

Let us ſuppoſe him to have ſeveral men ill of dangerous fevers, and no hoſpital to remove his patients to; for this really ſometimes is the caſe, from the great diſlike and averſion people in general have to let houſes for ſuch purpoſes.

When this happens, he muſt attend them at their billets. I have already pointed out the frequent inconvenience of theſe even to perſons in health: What, then, muſt they be

in ſickneſs?—bad beyond deſcription. Perhaps the chief part of the cure conſiſts, in theſe caſes, in pure air. But the poor ſoldier is mounted up in a cloſe, foul, dark, garret. At other times again the billet is pervious to every blaſt. Extremes are equally bad. What can the ſurgeon do in ſuch a dilemma, with ſo powerful an opponent to his meaſures?—alas! but little. His preſcriptions may be judicious; his attention great; and his attendance regular; yet he will only have the mortification of ſeeing his advice fruſtrated, and his patient every hour ſinking, till death in a ſhort time cloſes the ſcene.

WERE examples neceſſary to prove what is here advanced, I might quote ſeveral; but I ſhall content myſelf with hinting at one caſe only: here the patient's life was loſt from no other cauſe than the badneſs of his accommodations in his billet during a typhus, which at firſt did not put on a more than ordinary bad appearance; but every

every thing conſpired to render recovery impoſſible in the progreſs of the diſeaſe. It was in the unfavourable ſpring of 1782, ſome time before the appearance of the influenza which in May and June ſpread over the kingdom. I think it was in the month of March. The ſeaſon was extremely intemperate, and the billet among the worſt I ever ſaw. It was perfect mortar around his bed, which ſtuck to the feet the ſame as if in the ſtreets; and the room pervious both to wind and rain. In this ſort of apartment were ſeveral beds, occupied by the other ſoldiers. No change of billet could be procured; for no publican would receive a ſick man, for fear of contagion: neither, as yet, could any one be prevailed on to let a houſe for the accommodation of the regimental ſick. After this poor man's death, and ſome other misfortunes of almoſt a ſimilar nature, when the commanding officer determined to have a houſe for an hoſpital, if it was to be purchaſed for money, and one was with difficulty procured, it was

not

not better than the billets: even worſe than ſeveral of them. In all ſuch caſes the beſt medical treatment muſt ever be fruſtrated.

ANOTHER difficulty that the ſurgeon, perhaps, labours under, is the want of a good, careful, and tender nurſe. A very great deal depends on this ſervant. It is altogether impoſſible for the ſurgeon to be preſent with his patient on all occaſions, when he wants ſuch aſſiſtance as a nurſe-tender can give; and, was it even convenient, and he willing, he cannot be ſo uſeful in this reſpect as a nurſe. She ought to be with the patient on all occaſions, and almoſt conſtantly; ſince it is her duty to adminiſter both drink and medicines with care and punctuality; the laſt, at the exact times the ſurgeon orders them; for ſhould any neglect happen in the exhibition of the medicines, if not productive of worſe effects, it may at leaſt retard the patient's recovery. Suppoſe them neither given in the quantity preſcribed, nor at proper intervals, the effects

effects which the preſcriber expected may not follow; and ſhould the neglect be kept a ſecret from him, it may produce an unneceſſary change in the plan, to ſay no worſe, and, in the end, perhaps, with no advantage, if not detriment to the patient. Every one much converſant with the ſick knows the inattention of the generality of nurſes, for ſometimes both his practice and reputation ſuffer by it.

THOUGH I have mentioned here a female nurſe, in the army this is not always eaſily procured. Indeed, a careful *orderly*, or man, appointed to this duty, will anſwer tolerably well; but he is to continue, not to be changed every week, or leſs, as is ſometimes done, ſince it takes ſome time to qualify him for the office. What in the army is ſtiled a nurſe, and has already in this work been ſo denominated, is more properly the houſekeeper: ſhe cooks and caters for all the patients in the hoſpital, makes drinks, and prepares other medicines that require culinary

culinary treatment. She ſhould have a command, and be allowed an authority over the other *orderlies*, to keep them ſteady to their reſpective duties.

And, farther, with regard to the chamber-nurſes or orderlies duty: great attention is to be paid to the patient's calls of nature; he is not to be left to his own feeble efforts to riſe to the pot, &c. as I have too often ſeen the caſe; ſuch exertions in certain acute diſeaſes, not to mention the cold that he will catch, may be very detrimental to his recovery; or, through want of ability, he may wet, or otherwiſe dirty himſelf; all which, by the preſence and aſſiſtance of the orderly, will be prevented. Attention is likewiſe to be had to the manner even he lies in bed, whether he lies in an eaſy poſition or otherwiſe; attention to the ſtate of his tongue, I mean his mouth, lips, &c. to keep them moiſt, ſoft, and as clean as poſſible; if his teeth fur, or become encruſted, to wipe them frequently, and ſeveral

veral other minutiæ of this nature, which the ſurgeon may give him in charge, and ought by no means to be neglected. And if, at the ſame time, he has bliſters open, or other ſores, either accidental, or made as an aſſiſtance to his recovery, attention to keep them well dreſſed, and as eaſy to his feelings as poſſible; otherwiſe an irritation will be kept up, which may conſiderably diſturb the ſyſtem, not to be allayed till this cauſe is removed. For this is more the nurſe's than the ſurgeon's province, ſince it may not be in his power to viſit him above twice a day at moſt, while the nurſe or orderly is, or ought to be, conſtantly preſent, and from habit, and practice in ſuch ſort of attendance, which, to ſome, may ſeem "trifles light as air," but, in reality, are of great moment in the recovery of health, ſhe becomes far more expert in, and tender, than either the ſurgeon or others leſs accuſtomed to ſuch things generally are. Attention muſt likewiſe be paid to the ſleep which the patient gets, and its duration;

whether

whether ſound and refreſhing, or only a ſort of coma-vigil; whether with the eyes properly ſhut, or half open; attention to the ſtate of his intellects; whether his ideas be confuſed or clear, on his awaking from ſleep; with many things of this nature, abſolutely neceſſary for the ſurgeon to know, and for which he muſt entirely rely on the veracity and vigilant care of the nurſe: for an error here may be called an error in the firſt concoction, and may lead him aſtray in his ſubſequent preſcriptions. It is from the relation he receives in this reſpect that he will, in a great meaſure, be guided, and either continue, or change his mode of proceeding, or can form ſome prognoſtic of the future event.

Instead, however, of ſuch nurſes, or chamber attendants, the regulations of many regiments only allow what is termed an orderly man, *i. e.* a ſoldier from the ſame company with the patient. What attention can in general be expected from a clumſy, heed-

heedleſs ſoldier, ordered on a duty he greatly diſlikes from its nature, as well as from the confinement to which it ſubjects him? For the moſt part, he is only anxious for the expiration of the time he is obliged to remain on this duty, which is twenty-four hours, for he is often changed daily.

But ſuppoſe him poſſeſſed of feelings enough, and ready to do as far as in his power for his ſick comrade (I am ready to own I have found many deſerving the higheſt commendation here) that he is not only willing to attend to the directions given him, but ſedulouſly puts them in execution; and who, in a few days, might be tolerably well qualified to anſwer the place of a female; yet his attendance is only a day. Next comes another, perhaps as bruitiſh as this man was gentle and tender; into whoſe head all the men on earth could not inſtil a ſingle idea of the duty he is to diſcharge; or, at leaſt, will pay no more regard, than if he did not comprehend it.

It is well, indeed, that the continuance of this man is only for a day. But, alas! in the doubtful period of a fever, what changes for the worſe will a day produce, where bad attendance is given, or, perhaps, the patient altogether neglected! changes which the moſt judicious of the faculty may not afterwards be able to obviate!

THOUGH the ſurgeon gives him charges, repeated charges, relative to what he is to do for the patient, and even with threats of puniſhment, if neglected, yet, as ſoon as he is gone, will this fellow either go about his own amuſement, or, if he finds any one to give him liquor, or poſſeſſes any money himſelf to purchaſe it, haſten to get drunk in the houſe (I ſpeak now of the ſick in their billets) never once, perhaps, thinking more of the patient till the ſurgeon's next viſit, or till he be relieved next day by a third man of the ſame company, and ſo on, till the unfortunate ſufferer either dies, or nature gets the better of theſe obſtacles, and recovers him.

Such

Such is the attendance given the ſick in billets; the attendance in the regimental hoſpital, when under the ſame regulations, is oftentimes little better; and ſuch are the difficulties that oppoſe the ſurgeon's ſucceſsful practice!

SHOULD he be detected in this neglect of duty, and ſent to the *black hole*,* what purpoſe does it ſerve? The next that comes, perhaps, acts little better; or, ſuppoſe the contrary, more miſchief has already been done the patient by the ſottiſh idleneſs of this man, than can afterwards be retrieved. Here the ſurgeon's character may be at ſtake, and his patient loſt; while he has not only this to lament, which every man of feeling and humanity will bewail, but the commanding officer, alſo, may blame him, when he little deſerves it. This, ſhould it happen, is heaping Pelion upon Oſſa, grievance upon grievance: and this, ſurely,

* A PLACE of confinement for ſlighter miſdemeanors in the army.

ſurely, is no ſmall misfortune under which a regimental practitioner labours. Nay, if he wiſhes to diſcharge the duties of his profeſſion as an honeſt man, it is what muſt give him many hours of bitter regret, and ſad mortification.

Though I have painted the ſituation of billets in this unfavourable light, as what moſt generally happens, yet here, likewiſe, we find exceptions. Some of the publicans pay much greater regard to the ſoldiers billeted on them; and ſhould any of them fall ſick, act towards them with much tenderneſs and humanity. It is in this walk of life as in others; there are to be found in it a variety of diſpoſitions.

As far as my obſervations have yet reached in this way, the ſmall public-houſe keepers prove the moſt civil, and are the moſt tender to their ſoldiers. One reaſon I would give for it is, that the ſoldier and the people he is billeted with are more on a level in

in point of rank, and hence more familiarity takes place between them. Familiarity here does not, as the proverb has it, breed contempt; on the contrary, it foſters friendſhip, and a ſtrong attachment is frequently formed. Where this happens, the ſoldier lives as happily as the people's circumſtances and the nature of the billet will afford; and he may be ſaid to "fare ſumptuouſly every day," when compared to many of his fellow ſoldiers. He eats out of the ſame diſh, and drinks out of the ſame cup with his landlord and family, and, often, at little or no expence.

ANOTHER reaſon I would aſſign is, that many of theſe people have ſons in the army; this again begets ſympathy; they are kind to the ſoldier in hopes it may be repaid to their children, in like manner, living at the mercy of others in ſome different part of his Majeſty's dominions. It is parental tenderneſs; it is piety; and may their wiſhes be fulfilled, and their ſons placed among people

people equally diſpoſed to hoſpitality and humanity!

How happy have I been on finding a ſick ſoldier quartered on ſuch a houſe, where the miſtreſs was his nurſe, and who cheerfully adminiſtered to his relief, as far as her little wealth would permit; nay, often, with an anxiety and affection ſimilar to a mother. Here my *orderly man* gave me no concern. My directions were never given to him, but to this good woman, who would never fail to put them in execution, either herſelf or by ſome of her family; or, when family affairs prevented, was ſuch a check on the orderly, by threatening a diſcovery if he neglected, as made him more ſteady in the performance of his duty.

Well compounded cordials, or ſome light food, properly prepared and fitted to the patient's condition, is frequently a great help to keep up his ſtrength, and aſſiſt in forwarding his cure. Can ſuch nurſes as

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we have been deſcribing under the name of *orderlies*, prepare any thing of this kind, ſuppoſe them furniſhed with the materials, which a ſtomach ſo diſordered, ſo weak, can either reliſh or digeſt? A pudding of any kind they know not how to make; for there is but little variety of cookery uſed among the privates. Even panada, or water-gruel, which require the leaſt ſkill in preparing of any food for the ſick, is truely but ill managed when left to an orderly's cooking. In the greater number of billets, whatever of this ſort is neceſſary, he muſt prepare, or the patient muſt want it.

The entire want of cordials is another difficulty which oppoſes the ſurgeon's endeavours. I muſt not ſay he has it not always in his power to compoſe them for his patient; but I may ſay, he too ſeldom does compoſe them. I hint now at the uſe of wine. To ſpeak the truth, there is no fund for this purpoſe; and if cordials of any kind, attended with expence, are ordered,

dered, they muſt either be charged to the ſick man's account, or the ſurgeon muſt furniſh them out of the medicine-money. Out of this they undoubtedly ſhould come, if it will afford it—but of this ſubject hereafter.

And with reſpect to wine, one of the beſt of all cordials, the fund out of which it is to be procured is ſo ſmall, that little can be afforded. We ſaid before, that in many regiments thirty pounds a year was the ſole allowance for hoſpital hire, for a nurſe, and for wine. The nurſe's (houſekeeper) wages, if a female, which ſhould always be preferred, will abſorb nine pounds two ſhillings and ſixpence per annum of it; and the hoſpital,* with fire and utenſils (the hire muſt depend always on the place and conveniency of the houſe) will leave little of the remainder. Half a guinea a week I have

* In ſome towns the corporation furniſhes it free, and with coals alſo. It is ſo in Newcaſtle upon Tyne. This is a very rare occurrence.

have known paid: it is true, we find it ſometimes cheaper, but this muſt ever depend on circumſtances.

A BOTTLE or two of wine in ſome caſes proves of little ſervice. Many caſes have occurred in practice, where a bottle or two a day, perhaps, for more than a week's continuance, is too little an allowance. A bottle or two of wine in a low nervous, or in a putrid fever, may prove of no effect, when, perhaps, if continued, it might be the chief means to ſtop the progreſs of the diſeaſe; or, at leaſt, to enable the patient to bear up the better under it, by the ſupport it affords to the failing vis vitæ, and the tonic power and energy it conveys to the nervous ſyſtem. Yet, if the ſurgeon goes beyond three or four bottles in the courſe of as many weeks, if the fever and the indication for wine continue ſo long, he will ſeldom fail of receiving a *caution* to be ſparing in its uſe; and yet, as we have ſaid, the patient's life is

frequently owing to the liberal, though judicious uſe of wine.

It is not, however, an uncommon thing, at leaſt in a regiment wherein I ſerved, for the captains to order wine, at their own expence, for the ſick men of their reſpective companies. In this, the gentlemen of this corps have great merit. Perhaps there is not another in his Majeſty's ſervice, where humanity and attention to the welfare of the privates under their command are more conſpicuous; nor is there ſcarcely to be found a man of greater humanity and tenderneſs towards them than their lieutenant-colonel. Where ſuch a diſpoſition is found in a ſuperior officer, it has doubly happy effects, as the example is diffuſed among the inferior officers.* It is with great pleaſure I can bear this teſtimony with regard to the preſent officers that compoſe this corps. Thus far for the incoveniencies ariſing from bad

* Tenth regiment of foot.—1782.

bad billets, both to the privates themſelves and to the ſurgeon.

We ſhall now enquire whether the regimental hoſpital be altogether free from inconveniencies. That it is not, I know too well from experience. Were it always to continue in one place, the regulation of the hoſpital would be eaſy, and improvements might occaſionally be made; but this neither is, nor can be the caſe in a marching regiment. Their ſhort ſtay in one place ſubjects them to many inconveniencies beſides this; but theſe ſhall be paſſed over, as foreign to our preſent purpoſe. Inconveniencies, indeed, unleſs they become very great hardſhips, are the expected lot of a ſoldier, and to which it is his duty to ſubmit.

But to return to our ſubject: let us now ſuppoſe a houſe is procured for an hoſpital, tolerably commodious. This, however, is what ſeldom happens. For though it has hap-

happened in the preſent, it will be a thouſand to one, if it happens in the next quarters the regiment marches into. If it be ſmall, our patients are crowded, and the half of our ſick cannot be admitted. I have ſeen it conſiſt only of two ſmall rooms, one above another, with the kitchen, which made the ground floor; and in each of theſe no fewer than twelve men, though the room did not meaſure above twelve feet by fifteen,* the place being almoſt one continued bed, without ſpaces between, inſtead of diſtinct beds. Into this crowded ſpot the worſt caſes only were ſent. Some chronic caſes, ſome acute fevers, puniſhed men with their backs ſuppurating, and emitting a ſmell intolerable even to people in health. For when an officer finds a man of the company unfit for his duty, whatever be the nature of his complaint, and takes it into his head to ſend him to the hoſpital, though

* It is ſeldom ſo many ſick, however, are found at one time. The regiment was upwards of 600 ſtrong.

though it may be the moſt improper place poſſible for him, under the preſent regulations of the army, the ſurgeon muſt admit him, if it be inſiſted on; and we cannot at all times find officers capable of reaſoning medically. The reader may judge what comfort it muſt be to practice medicine here, and how prejudicial to the recovery of thoſe in acute diſeaſes, as well as dangerous to thoſe under chronic complaints. In this houſe, alſo, the ceiling was ſo low, that a man little above ſix feet high could but juſt ſtand upright under it: this made it ſtill worſe, from the greater confinement of the air.

CONFINED air itſelf is the cauſe not only of ſickneſs, but death among troops. The nature of confined air, and chiefly ſuch as has been frequently breathed without changing, is at this day ſo well underſtood, that barely to mention it is ſufficient. Thus ſays the judicious Pringle: "Among the "cauſes of ſickneſs and death in an army, "the

" the reader will little expect that I ſhould " rank what is intended for its health and " preſervation, the hoſpitals themſelves; " and that on account of the bad air and " other inconveniences attending them."*

On the other hand, if the houſe be penetrable to every ſhower, which regimental practitioners alſo but too often experience, even in ſummer, it is poor accommodation, and in winter intolerable; nay, ſometimes as bad as the worſt billet. The improvements we can make for the ſhort time we expect to occupy it, are either trifling, or none at all; for ſince a few months is the longeſt date we can promiſe ourſelves in the ſame quarters, the commanding officer has little encouragement to expend money, the good of which muſt be chiefly reaped by the proprietor.

I HAVE

* See alſo a paper on the bad effects of confined air, in Med. Tranſ. vol. 3. by Sir Geo. Baker.

I HAVE ſeen the houſe ſometimes ſo ſmoky, that a fire, even in the depth of winter, could not be kindled, without the patients being in danger of ſuffocation. On this account, it was even with ſome difficulty that victuals could be prepared for them. This was particularly the caſe at Tinmouth. When fevers were in the houſe, during the time of dreſſing meat, the ſick felt an uncommon uneaſineſs from the ſmoke, which was ſo thick and groſs, that it could almoſt be felt. Under theſe complicated evils I was obliged to practice in one of the worſt fevers I have experienced in the army.

THE want of a fire altogether to thoſe under ſome particular complaints not requiring confinement to bed, is a very chilly and cheerleſs circumſtance. It is ſcarcely tolerable to ſit without a fire in ſuch inclement weather as we often experience in the changeable climate of Great Britain. Here the

the nurſe, or houſekeeper, and the orderlies, are all diſcontented, and conſtantly murmuring, and laying their grievances before the ſurgeon. What can he do? He may regret the ſituation along with them, but he cannot change it; for, perhaps, there is not another houſe in the place that can be procured for the purpoſe.

In this ſituation, the houſe-patients whoſe complaints do not require them to be confined to bed, are under great temptations to drink, provided they have addreſs enough to procure liquor, and have wherewith to purchaſe it, without any regard to the nature of their complaints or the medicines they are taking. It is not, however, always they have their pay at their own management, as when men are ſent into the hoſpital, their pay is put into the hands of the hoſpital ſerjeant, who markets for them. This is a wiſe regulation. Moſt of them, however, have followers, who take ſtolen opportunities to ſupply them with drink; for

for though a centinel be conſtantly planted before the door, to prevent them from leaving the houſe without the ſurgeon's permiſſion, and, at the ſame time, to keep improper perſons from entering, yet they, not unfrequently, find means to bribe him, who, for his ſhare of the ſpoil, will wink at what his duty ſtrictly bids him repreſs. Theſe evils are not, either by themſelves or the centinel, conſidered as of much magnitude; yet, to many patients, they are matter of great moment.

It frequently happens again, that what are called *maligners* are obliged to be received into the houſe, *i. e.* ſuch as are idle; who, in order to keep from duty, feign themſelves ſick. Such ought to be ſhewn no indulgence; but a ſtrict watch ſhould be held over all that are thus ſuſpected, and, if found out, proper puniſhment inflicted. Theſe, for the moſt part, are ſuch as prove irregular, and create more trouble in the hoſpital than all the really ſick. But

if the centinel permits them to wander out of the houſe, or liquor to be brought in, it is long before the impoſition can be diſcovered, though the ſurgeon be ever ſo vigilant. For, ſo great will be the conſpiracy among the patients, that they will not readily diſcover one another: like other conſpirators, however, they ſometimes quarrel among themſelves, when revenge dictates diſcoveries, and the truth at laſt comes to light.

This is a grievance, though it may be looked on by ſome, as of leſs conſequence than others we have mentioned: much of this ariſes from bad hoſpitals. Yet, after all, though the lazy and impoſing ſhould in this manner prove troubleſome, a ſoldier ſhould never be turned out on the inviduous tale of another, or from an haſty fit of paſſion, leſt a man really unable to undergo the fatigues of his duty ſhould thence be ſubjected to it, at the hazard of his life. To blame my brethren here, might in me

ſeem

ſeem invidious, and I am unwilling to do it. 'Tis true, I have been told of ſerious errors of this nature, but none ever came immediately within my own knowledge. The adjutant of a certain regiment, a man of ſtrict veracity, and who has ſerved moſt of his life in the army, related to me an inſtance of this kind, which happened ſome years previous to the late war. Two men came, it ſeems, into the hoſpital, one of whom the ſurgeon, after ſome ſlight examination, pronounced an impoſtor, and diſmiſſed him to duty; the other was admitted. It is probable he had received a hint that one of them was a *ſconcer*; but the conſequence was not ſo trivial—he miſtook the perſon—and received him whom he might have diſmiſſed without danger! it would have been more for his credit had he admitted both; for, like giving charity to an impoſtor, leſt we ſhould miſtake, and injure a deſerving object, it would have been better to have acted in a ſimilar manner, till a more proper opportunity had preſented

to

to diſcover the cheat. The man rejected in this caſe, as it turned out, was then in a fever, of which he died. I would be far from ſaying, this was the cauſe of his death: he might have ſunk under the diſeaſe, even though admitted when he firſt deſired; but the ſurgeon was cenſurable in as far as it appeared, how little pains he took to inveſtigate his complaints. A man's behaviour on theſe occaſions ſhould be judged of from his general character: if he has been any time in the regiment this is eaſily known. Some of the privates of good character will make it their boaſt, that they never miſſed a guard when it came to their turn; others never mount one but with reluctance, and, if poſſible, will find excuſes on their duty morning, and feign complaints to get themſelves reported ſick. A ſurgeon ſhould take ſome pains to know the characters of the privates. He will find his account in it. Nor is it ſo difficult a taſk under the ſtrict diſcipline of the army.

The nurſe, or houſekeeper, of the hoſpital in ſome regiments, is a woman; in others, a ſoldier, to whom this office is allotted as his duty. Since a great part of the buſineſs this ſervant undertakes is to dreſs the patient's meat, to prepare drinks for the ſick, and to waſh for them (for they ſhould do this at a ſtipulated price) a woman is always to be preferred, where a choice can be made. Under her there muſt be one, if not more orderlies. I think, in general, there ought to be two: one to bring water, clean the houſe, and do other offices, more immediately about the nurſe; and the other to keep the patients rooms clean, carry them drinks, empty their pots, run little meſſages for them, and ſuch like. Beſides, in acute diſeaſes, when it may be thought expedient, to ſit all night by the patient: one can relieve the other by their ſitting up alternately. The nurſe may have the care of the medicines preſcribed, which are either to be adminiſtered

by

by herſelf, or, under her inſpection, by the chamber-orderly.

It is ſuppoſed the hoſpital is furniſhed with a proper ſet of beds, ſheets, and bolſters of coarſe linen. With reſpect to its colour, it is a matter of little moment: therefore, whether they are brown or bleached linen is immaterial; but that they be ſtrong, and cloſe in the texture, is more ſo. I would prefer chopped clean ſtraw to flocks, not only as being cheaper, but more wholeſome, eſpecially, as the beds are ſo apt to get wet. The ſtraw can be eaſily changed for ſome other, freſh and dry, and almoſt without loſs of time: it is not ſo if they ſhould be filled with flocks. The reaſon is obvious why I adviſe the texture to be cloſe—leſt the ends of the ſtraw protruding through, might, by the ſharpneſs of its points, irritate the patient, and diſturb him. The bolſters ſhould be conſiderably wider than thoſe I have ſeen, and which, I believe, were of the common ſize. We know how advantageous

tageous it frequently proves, to have the patient's head well raiſed. For a regiment of the complement already mentioned, we ſhould not be provided with fewer than from twenty to twenty-five beds. Ten of theſe ſhould be ſmall beds for ſingle patients, viz. for thoſe in acute diſeaſes, or under other complaints, where a bed-fellow cannot be admitted; the reſt double, or ſo large as to allow room for two to ſleep together. From the ſmall and circumſcribed bounds of a regimental hoſpital, it is impoſſible, if we have many ſick, that all can have ſingle beds; and ſince we have always ſeveral in the houſe that ail very little, or whoſe ailments do not prevent them from admitting a partner, we may ſafely, and it will be œconomy to lay them in the ſame bed. Beſides, we ſhould always have three or four ſpare beds, either for new patients, or to ſupply the place of thoſe that may be wetted, or dirtied by the incapacity of the patient to manage himſelf, &c. I have ſometimes uſed two in a day; for nothing is ſo prejudicial to

reco-

recovery as a wet or damp bed. Some of theſe beds ſhould be ſet apart for flogged men; and theſe ſhould always be ſingle. I ſay, ſet apart, becauſe, from the blood, ſupurated matter of their backs, and the oil, unguents, &c. applied to the wounds, the beds are ſo ſtained, and ſometimes hardened, as to be both unfit and unſeemly, to lay under a man with different complaints; ſo that, I think, it would be better to keep them ſolely for this uſe, with their blankets, ſheets, and pillows. Beſides, I have found ſome men who had a great averſion to them, merely from the uſe to which they had been applied. We need not fear they will lie by as uſeleſs lumber, unoccupied; we ſhall find but too frequent occaſion to uſe them, if the regiment be at all numerous. Every bed ſhould have two good blankets, and a coverlet. We ſhould guard thoſe that do not ail much, againſt colds: if the patients under acute complaints feel the clothes too weighty, it is eaſier to diminiſh than add, provided we be not furniſhed with

with a ſupply for this purpoſe. Theſe are conveniencies, however, we do not always find to this extent in an hoſpital; the want of which may be ſome obſtacle to the ſurgeon in his ſucceſsful practice.

When a patient is ſo ill that it becomes neceſſary for one of the orderlies to ſit by him, he undertakes this duty under the nurſe's inſpection. She makes a report of his behaviour to the ſurgeon on his next viſit. This part of the diſcipline is commendable; and, provided it be properly adhered to, is a good regulation. But, I am ſorry to ſay, there are many abuſes here, and when this happens, it is a real grievance to the ſurgeon, who muſt rely on the reports he receives. We find theſe too frequently a matter of form, and, indeed, often falſe: this they do to ſcreen their inattention. They will anſwer yes, or no, to the queſtions aſked, juſt as its ſuits them, or as they think may pleaſe the ſurgeon: but if more minutely queſtioned, can give no ſa-

tisfactory anſwers. Their falſe reports are worſe than none, ſince they may tend to miſlead the practice. He ſhould, therefore, truſt as little as poſſible to them, but endeavour to ſee, and examine every thing himſelf.

ANOTHER grievance which regimental ſurgeons often labour under, I cannot paſs over here, *i. e.* the murmurs of officers, if men are not ſo ſoon cured of their complaints as their anxiety would have them. The length of time men are kept in the hoſpital, is commonly their topic when in converſation with the ſurgeon.

IT is undoubtedly a laudable thing in an officer to pay a due attention to the privates he commands; to redreſs their grievances as far as poſſible, and to ſee that they are properly taken care of by thoſe whoſe province it is; but this, or rather a ſhew of it, may be carried to a degree very troubleſome, and far from commendable, reſpecting their medical

medical treatment. I do not know what to term this:—it is not merit; yet ſomething like it. I ſhould be ſorry to blame them for any thing which ſhews their care of the ſoldiers, but this may, and, I verily believe, is, over done by ſome; and, I fear, ſometimes with little other view than to create the ſurgeon uneaſineſs. If he is found negligent, they ſurely cannot ſpur him too much; if diligent, and attentive to his duty in general, this is cruel, is reprehenſible, and unjuſt. It is often more a mark of their want of judgement, than care of the ſoldiery. I have always found young officers, who knew but little of their own duty from their ſhort ſervice, moſt troubleſome in this reſpect. It would ſeem, that vanity leads ſuch to act ſo, as it ſhews their ſuperiority to the medical department in point of military rank, which ſeldom takes into conſideration either age, knowledge, or other qualifications. I am cautious, however, of blaming officers on this head; for, whether or not it proceeds from real tenderneſs, it is

better

better than more culpable neglect. It is like negative virtue, or the ſhew of religion; if it be not real merit in the poſſeſſor, it is an example to others, and may produce good effects. Yet I muſt apologize to thoſe gentlemen, and candidly acknowledge, that ſuch, for the moſt part, are the regimental practitioners of phyſic, that too frequently fill this office, that it is not without cauſe this cuſtom prevails among officers—for a ſpur, not a curb, is often wanted.

We cannot expect to find officers poſſeſſing medical knowledge: this belongs not to their profeſſion; nor is a want of it in any ways derogatory from their merit as officers and good ſoldiers; yet I have often thought, that if commanding officers knew ſomething of phyſic, it would render them better judges when the ſurgeon did, or did not, diſcharge his duty as he ought. But this is an impoſſibility, for many ſolid reaſons. If it could be found practicable, it would be frequently of ſervice both to the

ſurgeon

ſurgeon and his patients. He could explain the reaſons that retarded the cure, when the ſubject happened to be ſtarted, while the officer, on the other hand, would be the better qualified to guard againſt any impoſition. For, as things ſtand, the ſurgeon has it in his power to deceive his commanding officer if he be ſo diſpoſed, and thereby cover either his own ignorance, or neglect: and again, his commanding officer would not blame, where, perhaps, in place of cenſure, he deſerved praiſe. Theſe are alſo inconveniencies attending a regimental ſurgeon; but this, in ſome ſort, may be ſaid to attend every medical man's practice, as well out, as in the army.

The commanding officer has much in his power, both in the medical and diſciplinary walks. If the ſurgeon is a man of veracity, and otherwiſe diligent and informed in his duty, reſpecting the cure of diſeaſes, he ſhould allow him a great ſhare of

of his confidence. According to the preſent footing on which ſurgeons in general ſtand, they cannot be of half the uſe they otherwiſe might prove. Their rank is too low to give them conſequence; and, as was ſaid above, rank alone is all in all in the army.

It is the opinion of a military author, and I heartily, in this caſe, concur with him, that if any regiment or corps has the fortune to have only one judicious, humane, and ſufficiently able field-officer, it may always be wiſely regulated, during his reſidence with it, and has the direction of the whole. More, he adds, is to be expected here from the lieutenant-colonel and major, than from the colonel, as it is but ſeldom he remains with the corps; but where all three concur to this end, and are deſirous of every uſeful information from literary men, as well as from thoſe of their own profeſſion, we may eaſily pronounce, that the regiment will be fit for ſervice on a very ſhort

ſhort notice, and able to undergo the ſevereſt hardſhips.*

A SURGEON's education (for I ſuppoſe him always to be liberally educated) renders him a proper perſon for much of the confidence of his commanding officer. In all things reſpecting the ſoldiery (their manœuvres excepted) he can communicate, from time to time, much uſeful information. From his inſtruction, aided by the *orders* of the commanding officer, much diſeaſe may be prevented in the regiment. Domeſtic diſcipline and the arts of prevention, as is well known, can do more oftentimes than phyſic; and, what is ſtill better, may, for the moſt part, be applied with little or no inconvenience, either to the men themſelves or to immediate ſervice; and things tending to this end, it ſhould be his buſineſs to point out and inculcate. This will conſiſt of things little regarded but by the philoſopher.

WHERE

* VID. Brockleſby on Military Diſeaſes, &c.

Where the appointment of field-officers has been happy; and where the ſame regard has been paid to the medical appointment, almoſt every diſeaſe, except ſuch as ariſe from contagion, may be obviated in the regiment. Wiſe regulations ſtrictly enforced, will be found efficacious even againſt unwholſome diet, climate, and the other viciſſitudes of a ſoldier's life. In the navy, where more care has been taken than in the army, we find it ſo; and ſince there are on land leſs obſtacles to encounter in putting ſuch regulations in execution, we may reaſonably expect equal good effects. This, it is to be apprehended, will never come to paſs, till the ſurgeon has a ſuperior rank, and till more care be taken in the choice of this important officer. It is little we are to expect in the walks of philoſophic life from young and uninformed boys; yet much of regimental practice is committed to the care of ſuch. We may as reaſonably expect much military experience from beardleſs

leſs colonels, as much medical knowledge from beardleſs doctors: and yet, a man is not always to be eſteemed for his age.

To return: a very great complaint in the army is *blotches* over the body and extremities, often of a phlegmonic appearance, and to which ſome give the general name of ſcurvy. Theſe are ſometimes of a herpetic nature; at others a real pſora, or itch; or it may be a conjunction of both: for, I think, I have ſeen it ſo. Among ſoldiers they all go by the general name of the itch; and by many, I apprehend, are miſtaken for it, though the treatment ſhould be different. Such complaints are by officers looked on as eaſily and ſpeedily curable. It appears to them, who are unacquainted with the cauſes and ſeat of diſeaſes, or with their diſtinction, a trivial affair: yet will it often be found quite the reverſe. Theſe cannot oftentimes be removed without a total change in the patient's manner of life. This will be eaſily underſtood, when we

conſider, that a ſoldier's eating, drinking, and even clothes, are ſometimes in fault; and till theſe be all changed, no radical cure can take place. Let us ſuppoſe it the itch alone, and that his bed infected him, a cure cannot be made till his bed-clothes are either waſhed, fumigated with ſulphur, or changed. If he is in a billet, he may find it difficult to accompliſh either. The innkeepers will ſcarcely be at this trouble with a gueſt they ſo much diſlike.

When a ſoldier's food is of a thin, coarſe, watery kind, *i. e.* of a quality that produces little chyle, and even this of a bad kind; or if the food be of too dry, or of an alkaleſcent nature, ſuch as living almoſt entirely on hard, tough, dry cheeſe, and coarſe bread, with little or no vegetable food, is it to be expected that his juices are pure? and I have known them live on almoſt nothing elſe for weeks together, when they were not put into meſſes. As well might we expect to reap wheat from tares, or oats from

from rye as find wholeſome juices here. If his frequent change of lodgings ſubjects him to dirty beds, will he not partake of the foulneſs of thoſe that lay in them before him? People who are forced to afford beds *gratis* will be at little pains to waſh them at each change of lodgers. From contagion, and from the cauſes now pointed out, the ſoldier may be at the ſame time affected with itch, and herpes; and though the ſurgeon may effect a removal of the one, as its cauſe and cure are well known, yet the other eruptions, which I ſhall call conſtitutional, cannot, by the beſt ſkill, the moſt rational treatment, be rooted out, till his food is changed for that of a more wholeſome, and nutritious quality, as well as his whole mode of life.

In barracks, much of the inconveniencies ſurgeons, as well as the men labour under, are avoided. But, I am ſorry to ſay, the number of barracks in England is very trifling, when compared to the number of troops

troops in time of war; and ſeveral of the few we do poſſeſs, are either too ſmall or otherwiſe ill contrived. The number, as well as conveniencies of barracks, are much greater in Ireland. The uſefulneſs of a meſs is obvious; but in billets, where the privates are ſcattered up and down through the town, to form a meſs is next to impoſſible. Yet nothing conduces more to health; for then, whatever their inclinations may be, they are ſupplied with, and obliged to live on, wholeſome food. Their pay is not given them at their own diſpoſal; a certain portion of it is ſet apart for their diet. In billets it is far otherwiſe; each man receives his pay, and is at liberty to expend it as he pleaſes. Many will drink their whole week's ſubſiſtence in an hour or two after it is received, and muſt ſtarve, or live on chance the ſix enſuing days; and thoſe who do not behave ſo, generally make ſo bad a choice of their food, that their blood is impoveriſhed, and they become

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ſubject to inveterate cutaneous eruptions, as well as to other diſeaſes.

Cleanliness, alſo, in billets, is much leſs attended to, than in barracks. When ſcattered through a town, the ſoldiers are leſs attentive to this, becauſe leſs under the eyes of their officers. For although the rules of the army oblige them to appear twice a day on parade, this momentary, or partial cleanlineſs, is of little uſe in their general health. It extends to nothing farther than their ſhoes, croſs-belts, and muſquets, with the whitening of their hair with a little flour; the chief part is ſtill neglected.

With regard to the removal of theſe eruptions, and foulneſſes, it ſometimes happens, that change of quarters does more towards it, than all the medicines the ſurgeon has exhibited, or can adviſe, *i. e.* if a route carries a regiment from a dear country to a place where the neceſſaries of life are cheaper.

cheaper. Clean, wholeſome, nutritious food, comes now more within the privates reach. He can eat, becauſe his pay better affords its purchaſe.

What makes the great difference between the officer and private with reſpect to theſe foulneſſes of the ſkin?—their manner of living alone. Could the private eat out of the ſame diſh, drink of the ſame liquors, ſleep in the ſame ſheets, and wear the ſame number of ſhirts, &c. in the week as his officer, his hands and legs would be as clean, and his ſkin as ſmooth. Officers, then, ſhould not be diſcontented with their ſurgeon, if theſe foulneſſes which the men are, from the circumſtances mentioned, ſo liable to, be not as ſpeedily removed as their wiſhes prompt them to expect, provided they find the ſurgeon attentive in applying remedies as far as in his power. In ſuch caſes, having a confidence with the commanding officer is a great conſolation. Should an injudicious report be preferred

ferred againſt him, it will not act to his prejudice.

The venereal diſeaſe is another evil which is ſo prevalent among the ſoldiery, that it cauſes no ſmall trouble and vexation to the ſurgeon, and is none of the leaſt of the inconveniencies we are pointing out, which he is obliged to encounter. It brings him many hours of anxiety; for the officer frequently murmurs if the men be not ſpeedily cured of it; but it is oftentimes no ſooner removed than it is again contracted.

Among ſoldiers it is ſo prevalent, that no reproach follows it, either from their comrades or from many of their officers. While this is the caſe, all hopes of reformation are ſhut out. Yet, I would venture to give it as my opinion, that ſome puniſhment ſhould follow it; nay, every method practicable for its ſuppreſſion, as far as poſſible, ſhould be uſed. This has indeed been my language, when I have been anſwered,

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"It is the common courſe of nature to "deſire women; if you can deprive men "of paſſions, then you may of women, not "otherwiſe.—And why attempt to deny "ſoldiers a gratification which is ſo na- "tural, and enjoyed at pleaſure even by "the brutes?" But I would beg leave to anſwer theſe gentlemen, that it is only the common courſe of vice, not the common courſe of nature, thus to contaminate themſelves. It is true, that by nature we are all endowed with a ſtrong propenſity towards the female ſex. This is proper, as well as natural, ſince by the union of the ſexes the ſpecies is to be propagated. This is the method by which the Deity has thought fit to continue the human race, as well as other claſſes of animals. We find male and female among not only what is called the rational, but the irrational part of the creation; and even in the vegetable kingdom ſomething ſimilar.

Among the rational, with which it is our chief concern, though there be this natural propenſity of the ſexes for each other, yet the Deity has laid certain reſtraints on it. To have women in common, he well knew, would be the bane of ſociety, and muſt lay the foundation of many evils; and even tend to the decreaſe, not the increaſe of the ſpecies. We ſee this experienced every day among that unfortunate claſs of females that live by proſtitution. Sterility ſeems to be entailed on them as a curſe. The irrational world, as I ſhall call them, live not in ſociety, like men; at leaſt live leſs in it; and this, perhaps, may be one reaſon for his allowing promiſcuous cohabitation among them. Another reaſon is, they are almoſt univerſally more continent, more chaſte, if I may be allowed the expreſſion, than the rational kingdom.

Among theſe, the times of heat keep pace pretty much with the times of geſtation in the female; or the returns of it in the female are according to thoſe periods of propagation. In the rational world it is different. A greater latitude is allowed by nature to them. Perhaps, partly for the exerciſe of their rational faculties, which point out what is right, and what is wrong, and, among other things, points out the bad conſequences of the too frequent and promiſcuous uſe of women; but this latitude is reſtrained within certain bounds by a wiſe prohibition: for had it not been ſo, "to encreaſe and multiply," at leaſt in the ſame proportion, would not have been accompliſhed. But, granting that ſterility would not follow, other evils, of no trivial nature, would ſpring from thence. Paternal affection, if not altogether deſtroyed, would be much blunted; for as none could then certify his own progeny, none would be par-

particularly intereſted in procuring it ſubſiſtence, or education. Beſides, the irrational world do not ſtand ſo much in need of this aſſiſtance. They come ſooner to maturity, to their acme; nay, almoſt as ſoon as they come into the world ſome of them can nearly provide for themſelves. But man takes not only a long time to rear up, but much care; nor is it till after a long period he can provide for his own exiſtence.

This ſeems another reaſon that renders it abſolutely neceſſary for both parents to unite their endeavours to produce this great effect; and till then, as a farther ſtimulus, or ſpur, that love and anxiety for our children's welfare, which is known by the name of *parental*, always continues. As they grow to maturity, however, and can provide for themſelves, it becomes more and more weakened; and, as old age, which produces feebleneſs and incapacity in the parents, approaches, duty teaches the children to give them their aſſiſtance in turn. Hence the

the conſtant and continued tie of family affection.

But though it was ſaid, that the irrational world cohabited promiſcuouſly, yet, among ſome claſſes of theſe, we find a like ſtrict adherence of one male to one female, as long as it is neceſſary to effect the great purpoſes of nature. The winged creation court, and adhere to one mate, till their common progeny be capable of providing for themſelves. Then, and not till then, does the attachment ceaſe. After this, they forget one another: the purpoſe of nature being now anſwered, its longer exiſtence would be uſeleſs. It ſeems now to be altogether, and for ever diſſolved. As the parents ſtand not in need of the aſſiſtance of their progeny in old age, filial and parental affection have no longer exiſtence. This link ſeems alſo broken; for as birds are the prey of one another, it is very probable, few of them live to old age, *i. e.* to ſuch an age as renders them incapable of pro-

providing for their own ſupport. And this may be a farther reaſon why it becomes ſo ſoon, and ſo totally diſſolved. A remembrance of kindred could be productive of no good; on the contrary, it might ſubject them to anxiety and grief, ſhould they ſee, or know, the fate that may often attend their kindred.

The laws of nature, therefore, as well as the regulations of ſociety, have eſtabliſhed it very differently among the rational world: hence marriage, and the care of families. In a word, where the female confines herſelf to one male, propogation follows, and the order of nature takes place; but when ſhe rambles from day to day, looſe in her deſires, admitting every ſolicitor, barrenneſs is the conſequence. If this method was followed univerſally, would not the human race, in a few ages, become extinct? But this is a queſtion I ſhall leave to the farther diſcuſſion of the moraliſt, and proceed with my proper ſubject.

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We ſaid, that the venereal diſeaſe was an evil which created great trouble to the ſurgeon, notwithſtanding its cure is ſo well known. Some method ſhould be deviſed, either for the entire ſuppreſſion of fornication, or at leaſt of rendering the opportunities of contracting the diſeaſe leſs frequent. To aſſiſt in this ſcheme, no countenance ſhould be given to ſuch practices by the officers. It ſhould always be followed with ſome puniſhment; and, on the other hand, every poſſible encouragement held out to marriage, of which the nature of the ſervice will admit. We acknowledge, marriage is not prohibited in the army, yet I have long thought, that too little encouragement is held out for it; nay, I have ſeen a manuſcript book of orders, wherein the men were entreated not to marry. We know, however, many families are brought up in the army, among the privates, moſt of whom, as ſoon as fit, enliſt either in the regiment wherein they were born, or in

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ſome other. And from this ſource alone, a conſiderable body of troops, for the moſt part the beſt ſoldiers, are added to the army; and, I am confidently of opinion, it might be turned to much farther account for the public ſervice, by giving greater encouragement to marriage with modeſt women. I know there are difficulties attending it, which, in ſome meaſure, might be removed. When a regiment, for inſtance, is ordered on foreign ſervice, it is only a certain number of women that are permitted to go abroad. Proſtitutes frequently find means to go, when married women are ſeparated from their huſbands. This ſhould be prevented as far as poſſible. Perhaps, if a regiſter was kept of the married men in each company, pointing out the time of the marriage, and the names of the parties, and this called over on embarkation, to aſcertain the really married, in order to exclude proſtitutes, and admit theſe, it might be ſome means of obviating this impoſition, and ſome encouragement for marriage. Every

woman

woman of bad fame found among the ſingle men ſhould be drummed away, while ſome reward ſhould be offered for diſcovering ſuch as on theſe occaſions kept them ſecreted, and ſome ſtigma of reproach put on the offender.

I DO not know whether ſomething like the following might not anſwer to prevent fornication, at leaſt it might be tried, viz. That a certain ſum ſhould be deducted from the pay of every ſoldier who had contracted this diſeaſe. When they have not to pay for it, they contract it with the leſs reluctance. And this is the caſe in many regiments. But in others, again, each man pays a crown for his amour, which the ſurgeon gets for his trouble. Reſpecting this, I have in another place ventured my opinion.* To pay this they ſhould be put on ſtoppages of a penny, or two-pence a day, till diſcharged: hence the puniſhment would

* VID. Thoughts ſubmitted to Officers, relative to a Regimental Fund for the ſick Wives of the Privates.

would exiſt till the payment of the laſt penny. This would not too greatly diſtreſs them; but, at the ſame time, operate ſo far as to make them cautious in future. In the navy, a much ſeverer tax on this pleaſure exiſts. Each man pays no leſs than fifteen ſhillings for his cure. This alſo goes to the ſurgeon: perhaps it would be better if differently diſpoſed of. In the army, this venereal money ſhould be collected, and ſhould make part of a fund for the relief of the modeſt married women of the regiment, when incapacitated from earning their food by ſickneſs. And when a married man contracted the diſeaſe, the fine ſhould be doubled, both from the double dire effects it may produce on his wife, and for his having leſs temptation than an unmarried man of going aſtray. Here he breaks the marriage vow, ſo ſolemnly ſworn before God and the world; and, to add to his guilt, he makes the innocent a partaker of a loathſome diſeaſe, which not only may deſtroy her peace of mind, but her health

ever after. I have but too often ſeen this the caſe in military life.

This is a complaint of all others with regard to which an officer ſhould be cautious of reflecting on the ſurgeon, if it be not ſo ſoon removed as he may ſuppoſe it ought. The truth of this will appear, if it be conſidered how liable the men are to impoſe here. The ſurgeon ſhall diſcharge a ſoldier to-day perfectly cured—that very night this man ſhall cohabit with ſome unclean proſtitute, and, in a few days after, he will return ill of the ſame complaint, new contracted: firſt telling his officer, to ſcreen himſelf, and obviate a reprimand, as well as to obtain leave to be again returned in the ſick liſt, that the ſurgeon ſent him to duty before he was properly cured; but will cautiouſly conceal his new illicit amour. Hence it is kept hid for ſome time, and the blame muſt fall on the ſurgeon, till his comrade, or ſome of the men that were privy to the affair, diſcover it.

Till

Till this takes place, it goes current among the corps, that the ſurgeon turned him out too ſoon, as they call it. I have been frequently ſerved ſo, but I have always been happy enough to have the commanding officer on my ſide, and able to clear myſelf to him. I had a remarkable inſtance of this in the ſummer of 1783, where an idle, ill-behaved private repeatedly ſerved me ſo, and had addreſs enough to make the lieutenant of his company give credit to his tale for a day or two, but the major, then the commanding officer, readily acquitted me.*

ANOTHER very ſtrong argument in favour of our opinion, that officers ſhould beſtow all the pains in their power to ſuppreſs this promiſcuous uſe of women in the army, is, the decay it ſoon produces in the ſoldiers conſtitutions. A man who has been frequently affected with this diſeaſe will never

* VID. Thoughts to Officers, &c. where I have related this caſe at large.

never enjoy good health, nor be long fit for the duties of a ſoldier. If he contracts a confirmed pox, which he can hardly eſcape, how difficult it is to eradicate it out of the conſtitution! even in thoſe that can afford every conveniency to favour a complete cure, it is ſometimes not done without the utmoſt difficulty. It becomes much worſe in a private ſoldier, who has frequently every thing that tends to retard and prevent his recovery againſt him. In caſes, indeed, of this confirmed nature, it is ſeldom the officer will permit the patient to continue long enough under the ſurgeon's care to perform a radical cure. The great number of ſick is his conſtant complaint. What can the ſurgeon do?—as ſoon as ſome of the worſt ſymptoms are removed, he marks him out for duty, to avert the blame of his keeping a patient ſo long in the hoſpital. But the unfortunate man is ſoon obliged to return: he has a rheumatiſm; univerſal pains; nodes; inflamed eyes; impaired ſight; impaired hearing; is aſthmatic; has obſtruc-

obſtructions, perhaps, of the liver; obſtructions in the urinary diſcharges, either in the bladder, or conſtrictions and caruncles in the courſe of the urethra; is affected with fiſtula in ano; is covered over with venereal ulcers; is totally cahectic; and though a young man, ſeems worn down with years and infirmities; a conſtant ſanies diſcharges from his head; has glandular ſwellings; is hoarſe, from an affection of the palate; and has loſt great part of his noſe; his head is giddy, ſo that when he ſtoops, he has ſcarce ſtrength to raiſe himſelf; his lungs are affected, and he has a ſevere cough, and purulent expectoration; he trails out ſome months longer a life of miſery, and then falls, at an untimely age, a martyr to his irregularities! From this it muſt appear, how detrimental to the ſervice the venereal diſeaſe proves; and it appears alſo, how neceſſary it becomes to attempt, as much as can be done, its ſuppreſſion in the army.

Sore legs are another frequent complaint among ſoldiers, and prove alſo a very troubleſome affair on many occaſions to the ſurgeon. A ſoldier with ſores on his legs cannot properly do his duty, becauſe he cannot wear his long gaiters, and he dare not appear on parade for duty without them. Theſe may be of the herpetic kind already mentioned, or they may ariſe from a different taint; they may be venereal, and will only yield to mercury, and thoſe remedies ſuited for expelling this poiſon from the blood. Although the ſore may be trifling, and ſuch as does not injure the general health, yet, if their conſtitutions are infected with the venereal diſeaſe, it may prove very troubleſome in healing. In this caſe, the officer may think it neglect in the ſurgeon, and want of proper management, to keep a man in the ſick reports for ſome weeks, with a ſmall cut on the ſkin, as they will call it. It is in vain to attempt an explanation of the cauſes that retard the cure:

cure: his want of knowledge in the ſcience prevents his comprehenſion of the caſe; and, perhaps, his belief in what he is told may be wanting, eſpecially as the ſore may be ſmall, and as he forms his judgement totally from appearances.

In caſes, however, of this nature, the officer ought to rely on the fidelity and probity of the ſurgeon, provided he knows, from the general tenor of his conduct, he poſſeſſes theſe virtues.

A fine young man had a ſmall ulcer on one of his legs, for which he was ſent to the regimental hoſpital. He continued there above a month, and no cure could be made; for, like many of his brother ſoldiers, he was irregular, and fond of ſpirituous liquors, which, from time to time, he found ſufficient means to get brought into the hoſpital to him. The length of time he remained in it produced murmurs againſt the ſurgeon from the officers of his com-

company. They were of opinion (it muſt be confeſſed, there was apparent reaſon on their ſide) that ſo trifling a ſore might have been more ſpeedily healed. He was therefore taken out of the hoſpital, and delivered over, as the term is, to the regiment. The regiment then lay in barracks; and the poor fellow was confined, by one of the ſerjeants, to his barrack-room. The ſerjeant had, as a bravado againſt the ſurgeon, profeſſed *he* would ſoon *cure it*, provided he was put under *his* care. When once a ſoldier is ſtruck out of the ſick liſt, the ſurgeon is no longer anſwerable for him: hence he took no more notice how the man fared; and the more particularly as his removal in this manner was intended as a reproach on him. Things went on for about two months, without farther enquiry on the ſurgeon's part, till one evening, the ſurgeon was ſent for in all ſpeed to viſit him, being informed by the meſſenger he was juſt dying. He found this ſtrong conſtitutioned man, for he was ſo when he left

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the houſe, ſitting up in his bed, and panting for breath: his ſhoulders raiſed nearly as high as his head; a great palpitation of the heart; an oppreſſion of the præcordia; with all the other ſymptoms of hydrothorax: the abdomen tumefied, and evident marks of aſcites; the extremities ſwelled; and, indeed, the whole ſyſtem in ſuch a condition, that medical aſſiſtance was in vain: the ſore on his leg looked worſe, and was more enlarged. He was, without heſitation, pronounced near his end. He languiſhed, however, a day or two longer before he died. Here, the diſeaſe he fell into from cloſe confinement, and the ſerjeant's ſtrict diſcipline, not the ſore on his leg, were the cauſe of his death.

WHOEVER is acquainted with the human frame, and the nature and nicety of its component parts, will eaſily underſtand the conſequences of want of exerciſe, nay, almoſt of motion, for ſuch a length of time; the cloſe air of the room, in which lay thirteen others every night, with the heat alſo from

cooking daily for ſo many men, all conſpired againſt him, together with the ſudden change made in his diet, which was now very ſparingly allowed; while, as an addition to the evil, he was in the vigour of life, and had previouſly been accuſtomed to take exerciſe to a great degree. It turned out, however, well for both the ſurgeon and regiment; for, had nature got the better of the ſerjeant's ſtrict diſcipline, and the ſore healed, though it ſhould have left a broken conſtitution, it would have proved a conſtant bone of contention between the officers and ſurgeon; and ſince it ended, as might be reaſonably expected, fatally, it will, in that regiment, at leaſt, moſt certainly prevent ſuch raſh proceedings, and irrational, if not criminal quackery, for the future.

Thus have we pointed out ſome of the chief difficulties a regimental ſurgeon has to contend with in his practice; and, it muſt be confeſſed, ſome of them are not of a trivial nature. His own prudence, however, will teach

teach him to obviate ſome of them. If he cannot prevent them all, conſcious of having diſcharged the duties of his ſtation and profeſſion, as far as in his power, he will conſole himſelf under any undeſerved reflections that may be thrown on him in the courſe of his ſervice. Did there exiſt no other reaſon to wiſh the rank of a ſurgeon in the practice of a regiment greater, and the place more honourable, this alone would be a ſufficient one: I mean, that it might place him beyond the power of the ill-judged remonſtrances of perſons whoſe knowledge in his profeſſion, give them no ſhadow of claim to ſuch an authority, or aſcendancy over him.

It is the ſurgeon's duty to paſs recruits, *i. e.* to examine whether men enliſted be fit for the ſervice. In performing this, he labours under ſome difficulties; for, if the man be rejected by him as improper, the officer who enliſted him is offended; indeed, in all probability, he is a great loſer; for,

for, if a recruit be not approved of, all that was given him is loſt to the officer. But if, to pleaſe the officer, the ſurgeon accepts, and ſigns his name to the ſound liſt, he is blamed afterwards by the regiment, as well as by the commanding officer, when it is diſcovered the man is always in the ſick reports, and really unfit for a ſoldier. Here he muſt be diſcharged: the King loſes by him, and the ſervice is injured. We may place this, however, among the ſurgeon's difficulties; for he oftentimes finds himſelf in a dilemma; and, let him act as he will, on theſe occaſions, he may be ſure of giving offence to ſome party. It is wrong to cheat the King, and ſign a falſhood: it is a pity to put an officer, who, perhaps, has only his pay to ſupport him, and is now under the encreaſed expence of the recruiting ſervice, to the loſs he muſt ſuſtain, by rejecting his recruit.

CHAP.

CHAP. III.

Of the Surgeon's Qualifications, and of his Tenderneſs to the ſick Soldiery.

I HAVE thus pointed out ſome obſtacles that oppoſe the ſurgeon's endeavours, and ſometimes fruſtrate his wiſeſt attempts. I hope he will now allow of equal freedom, and excuſe me, in placing ſome cautions in the oppoſite ſcale, which may more immediately concern his own behaviour. Though I ſhall do this with freedom, and without farther apology, yet it is only with a true wiſh for his welfare, and ſincere regard to his intereſt; and that he may be the better enabled to preſerve his good name, and, as far as poſſible, avoid deſerved cenſure from the officers, from his patients, and from the world in general.

The ſituation of a medical man is of all others the moſt delicate; and as it is a public line of life, the world is ever ready to make free obſervations on the conduct of thoſe engaged in the profeſſion. If theſe were always the reſult of deliberation, it would be of leſs moment: but this is not, on all occaſions, the caſe. A trifle may gain, as a trifle may often loſe a practitioner a reputaton, which, like a ſpot on white paper, can never be ſo clean wiped out as to render the ſtain imperceptible. It is as delicate as the character of a lady, where even ſuſpicion of ſome wrong ſtep, will ruin her fortune for ever. Hence the care we ought to obſerve, and the circumſpection we ſhould uſe in all our actions.

In entering into a regiment in a medical line, the firſt thing a ſurgeon ſhould have in view is, his own qualifications for the office he is about to undertake. He ſhould reflect on the nature of his charge, its great importance,

portance, and how culpable he muſt appear, both before God and man, in the neglect of any part of his duty.

The lives of upwards of ſeven hundred men are, I may ſay, put into his hands,* provided the regiment contains its full complement; and for the care he takes of them when ſick, he is anſwerable to his country, his King, and his conſcience. If he has found intereſt enough to fix him in a ſtation which he knows himſelf ill qualified to fill, from his want of medical knowledge, or proper opportunities to receive it, he uſurps the place of the more liberally educated, and deceives his patients. Beſides, he impoſes on the regiment that accepts him, who, perhaps, before his admiſſion, were taught to believe far otherwiſe of his knowledge.

If

* Vid. Introduction for the complement of a regiment. The complement of ſome is even 1000; though, it is true, they are ſeldom complete.

If good opportunities of information in the ſcientific parts of his profeſſion have previouſly been held out to him, and, inſtead of embracing, he has neglected them; if he waſted that time and money his parents or friends allotted him for the laudable purſuits of philoſophic inveſtigation, and a knowledge of medicine, in criminal idleneſs, or ruinous debauchery, whereby his health of body and powers of mind have been impaired and enervated, his conduct is highly reprehenſible, is culpable; and it is ſtill heightened by his puſhing himſelf into an office, where he may have it in his power, nay, cannot well avoid, to do much, though not intended miſchief. But, we hope, this is what does not often happen.

If the beſt informed underſtandings in the medical walks of life too frequently find great difficulties in determining how to act for the beſt, what can the leſs informed do when difficulties ſurround them?

Can

Can perſons unacquainted, perhaps, with the moſt obvious parts of phyſiology; even with the circulation of the blood, and courſe of the chyle, not to mention the ſituation and functions of all the different parts of that intricate, but noble ſtructure, the human body, pretend to remove the many diſeaſes to which theſe are liable?—pretend, indeed, they may, but, in their fortuitous attempts, there is but little rational probability to expect ſucceſs. Add to this, perhaps, their utter ignorance of the nature and properties of the ſubſtances they exhibit, and the effects they are likely to produce. This they have but little chance of knowing, ſhould the above ſuppoſition be true, ſince it will depend partly on the ſtate of the patient at the time, and partly on the nature of the medicine exhibited.

I AM led to make theſe reflections from having obſerved numbers of young men paſs their time very idly at the univerſity, and other medical ſchools, where their

friends had placed them for improvement. Many there ſpend whole ſeaſons without ever applying to any thing ſerious, or ſcientific, till not only the time allotted for their ſtay has elapſed, but their money exhauſted. Several of ſuch, however, find means, through the aſſiſtance of friends, to obtain appointments in the army, particularly in time of war, either of ſurgeons or ſurgeons mates. Here we would have ſome reaſon to conclude, did not charity forbid us, that they often commit eſſential miſtakes; for, however upright may be their intentions, their incapacity of forming and following proper plans is a bar to their ſucceſs. It is, indeed, frequently beſt for the patients, when perſons of this deſcription attempt leaſt. It is to be hoped, however, there are now few ſuch in the ſervice.

MANY, likewiſe, who enter into the army in this line, never were at all within the limits of an univerſity, nor ever had an oppor-

opportunity of hearing, in any medical ſchool, a ſingle lecture on the ſubject. If ſuch be qualified to aſſiſt the operations of nature, in removing diſeaſe and reſtoring health, the world may judge. Boys who have ſerved in the ſhop of ſome country apothecary only a year or two, nay, it may be, only a few months, have been admitted, and that without any attempts towards an examination;* nay, we could point out caſes

* A BOY in a certain town in the North of England, as I am well informed, had ſerved there in an apothecary's ſhop about a year. A certain gentleman of rank in the army, who had ſome connections with the town, was then in America (it was during the late war). The boy's father was a freeman of the place. From this, and the gentleman's connection with it, the boy was ſent over to be provided for by him; which, without any farther medical education, as my informer aſſerts, was ſpeedily done, firſt by a mate's warrant, and ſoon after he was made full ſurgeon to a regiment. Even while I am writing, a friend informs me of a young man under the ſame diſadvantages of education, who, after ſpending ſome time in a ſhop, was, by the zeal (I ſhall call it the intemperate zeal) of a friend, advanced from behind the counter to be ſurgeon, as well as an acting officer, in a militia corps. This may be relied on as a fact: my friend is acquainted with the party.

caſes, where even a common ſoldier from the ranks, after aſſiſting the ſurgeon of the regiment, in ſpreading plaiſters, for ſome time, and in the capacity of orderly man, was appointed mate thereof, on a vacancy that ſoon happened; and, if he had outlived the ſurgeon, or a vacancy happened from promotion, or other cauſes, would, no doubt, have ſucceeded him in the office.* Genius, diligence, and a mind turned to enquiry and obſervation, may, in a great meaſure, ſupply the place of education; but where both are wanting, the conſequences are obvious. If proper proofs of ſuch talents have been exhibited by ſuch as receive theſe irregular appointments, it becomes ſome apology for the conduct of their friends in obtaining for them theſe ſtations. I hope, however, ſuch caſes as the above are not frequent. It is ſuch examples as theſe that lay

* WERE it neceſſary, to gain it further credit, I could point out the name of the ſoldier, and regiment wherein this happened.

lay the regimental practice under the diſgrace we in general find it.

It may be ſaid, the army is a good place for improvement in medical knowledge. In ſome reſpects this is true; but it is ſo to ſuch only as have been previouſly accuſtomed to reflect, and capable of making obſervations. Sir William Temple very judiciouſly obſerves, that "though a man may "grow learned by other men's thoughts, yet "it is from his own thoughts, as well as "experience, that he will grow wiſe."* It is little of this kind we are to expect from an apprentice boy, or even one who has ſpent ſome idle time at ſome medical ſchool. Beſides, the army is a bad place to begin reflection in. The cuſtoms there are too much adapted to the want of thought, and the giddy diſſipation, which their youth, joined to their inexperience, renders them prone to follow. Dreſs, and ſhew, are but ill ſuited for

* Vid. On Health and long Life.

for ſerious ſtudy. Theſe make a conſtituent part of the life of a ſoldier; and, for a ſoldier, they may, and I believe are, neceſſary, in order to throw a luſtre, and kind of dignity round the ſervice. Theſe, for aught I know, may be altogether proper, in a certain meaſure, for the very exiſtence of the army; but they agree very ill with the ſcientific ſurgeon, or with him who wiſhes to become ſo. To uſe the words of an author we have already mentioned, and who has touched on the ſubject,* "All men of "candour, who have ever felt, or known "the force and happy effects of long and "diligent ſtudies, and continual application "to any ſyſtem of ſcience beyond moment-"ary impulſes, will make no ſcruple to "allow, that a want of early culture, al-"moſt a total deprivation in youth of "intercourſe with the moſt refined part of "their profeſſion, and, as it moſt commonly "happens, an abſolute neglect of a liberal "educa-

* Dr. Brocklesby. Vid. Œconom. & Milit. Obſ.

" education in the generality of ſurgeons,
" are altogether apt among them to induce
" quackery, or, at beſt, a narrowneſs of
" thinking about medical ſubjects."

But I ſhall now ſuppoſe there is no farther need of theſe reflections, but that diligence has been united with the opportunities of improvement; and that the labours of thoſe gentlemen have at length been crowned by the honourable teſtimony of thoſe teachers of the different branches they have attended; that they have entered the army afterwards through a ſincere deſire of practiſing diligently, and conſcientiouſly, as far as their abilities and knowledge permit and extend; that their ſole wiſh is to be uſeful to thoſe under their care, and ambitious, at the ſame time, of their own farther improvement; converſing always with medical men, on medical ſubjects, as often as opportunity ſerves; and collecting facts, either from their own obſervations, or the obſervations afforded them by the relation

tion of others. It is men of theſe diſpoſitions that can practice properly; it is ſuch only that can reflect true honour on the military medical profeſſion. Such was the late eminent Pringle; and ſuch were many others we might mention in the ſervice, men of diſtinguiſhed merit, and well-earned fame.

The next caution I would beg leave to offer to the regimental ſurgeon is, tenderneſs to the ſick ſoldiery. Yet it need not be told, men of the diſpoſitions now pointed out, that tenderneſs and humanity ought ſtrongly to mark the character of every one engaged in the practice of phyſic. They are already convinced it ought, from their acquaintance with the frailty, and miſeries that inevitably await the life of man. Miſery, of one kind or other, they are daily converſant with: nor am I apt to believe, as ſome have aſſerted, that this ſteels their hearts, and renders them more callous to the ſufferings of others. Habit, indeed, makes

makes ſuch ſcenes more familiar, but it does not follow, therefore, that the feelings of humanity are obliterated, nor even the practitioner's ſympathy leſſened, becauſe, occaſionally they are obliged to give ſome pain, in order to reſtore health. A ſympathizing diſpoſition is amiable; nay, medically uſeful to the poſſeſſor, in as far as it impreſſes the patient with a good opinion of his doctor, which is always one ſtep towards the cure; for his advice and preſcriptions will now not only be more cheerfully and ſtrictly complied with, as appearing to be thoſe of a friend intereſted in his recovery, but a calmneſs, quietude of mind, and confidence will follow, very eſſential, it may be, to his future health. The contrary is brutal, nay, even impolitic, in the ſurgeon, would he rightly conſult his own eaſe; for, while it wounds the patient, it fails not to deſtroy this confidence. Beſides, it often makes the advice, admitting it to be good, either deſpiſed or neglected, unleſs it be ſuch as exactly ſuits

the patient's inclinations; and, conſequently, it muſt create him more trouble by the protraction of the patient's illneſs.

WHAT can add more to the diſtreſs of a poor ſufferer under ſickneſs, than roughneſs of behaviour in him from whom relief was expected? He is already weakened, and enervated by the affliction he is under. His ſituation, too, is generally leſs comfortable than he has experienced it in ſimilar circumſtances, before it was his lot to wear a cockade. He has now no friends near to ſympathize with him; no parental, or fraternal anxiety to watch over him, or procure thoſe little delicacies that the ſituation of a ſick man often requires; none to perform thoſe other little offices of attention which, if in reality they do no good, at leaſt quiet the mind, and pleaſe the peeviſhneſs attendant on ſickneſs, and may even have their effects in co-operating with the doctor's advice. Theſe he may remember, and regret; while ſuch roughneſs in his ſurgeon makes

makes the contraſt more perceptible, and adds to his uneaſineſs. He feels now, with a double pang, every harſh expreſſion uſed. Should any ſurgeon, or any man whatever, act in this way, I would not heſitate to call it both unmerciful, and unmanly. In a regimental practitioner more eſpecially ſo, ſince the ſoldier has it not in his power to reſent it, by calling in another. The nobleſt mind is always the moſt merciful, the moſt capable of tenderneſs and pity.

A BEHAVIOUR of this kind in the army has this farther aggravating circumſtance againſt it, that not only the ſurgeon, but the ſoldiers well know, that in any other ſituation but this, if practiſing even among the poor of an hoſpital, or diſpenſary, he durſt not act ſo, ſince his intereſt, reputation, and livelihood, would riſe up againſt him, and forcibly forbid it; powerful arguments, truely, to curb this irritable temper. Out of the army, it would immediately cauſe

cauſe his diſmiſſion; nor would he (and deſervedly) ever after be employed, either by thoſe, or their connections, whom he had thus ſo brutally abuſed.

THERE is, I know, an argument uſed by ſome army practitioners, to palliate the rough treatment ſoldiers ſometimes receive from their ſurgeons. "If you ſpeak tenderly," ſay they, "to ſoldiers, you may "be ſure never to be attended to. Diſobedience and diſreſpect will be the conſequence; and this will not only injure "the medical treatment, which muſt be "enforced when they refuſe to ſubmit to "it, but will affect the ſubjection of the "men, and the diſcipline of the regiment." This objection, I am apt to believe, is ill founded. We may find many among the privates of as ſubmiſſive a mind, and even humane, and tender feelings, as in any other walk of life, among people of the ſame rank; nay, ſome alſo, whoſe rational faculties

culties are not inferior to many who hold a high command over them. Such men will neither diſobey, nor yet diſregard the ſurgeon the more for giving his directions in a ſoft, and tender tone of voice; nor will their officers have the leaſt cauſe to complain of more want of order among them from this ſource. Harſh, and ill-natured behaviour to men of theſe diſpoſitions is cruel. They know its injuſtice, and feel it ſeverely. They contraſt it with what, in a different ſtation, before they enliſted, they had been accuſtomed to:—the compariſon is wide; the treatment ſits heavy; they conclude they are become ſlaves, and are now unhappy.

—"But to think, may it pleaſe your "honour," 'continued Trim, a tear ſteal-'ing into the corner of his eye as he ſpoke,' —"to think of two virtuous lads, with "hearts as warm in their bodies, and as "honeſt as God could make them—the "children of honeſt people, going forth with

" with gallant ſpirits to ſeek their fortunes
" in the world——and fall into ſuch evils!"
TRIST. SHANDY.

SEVERAL, we know, enliſt from miſfortunes, who once kept decent houſes, and lived reputably among their neighbours. In the army there is no reſpect of perſons; no diſtinction made. They muſt eat the ſame food, lie in the ſame apartments, do the ſame duty, and ſuffer all the hardſhips their ſtation ſubjects them to, equally with their more hardened, and leſs deſerving comrades, who, perhaps, never experienced a way of life ſuperior to that they are now engaged in. Theſe are the men on whoſe minds harſhneſs of treatment dwells with more pungency. Nay, I freely confeſs, I never knew any good purpoſe anſwered by it, even among the ill-behaved; the privates of real bad character: for, every one knows, the army, in times of war, is a medley of all characters, from thoſe we have been deſcribing, to the common highwayman.

wayman. Though they dare not reſent the ſurgeon's treatment, they hate him, and will take the firſt opportunity of doing him an injury, if they think a diſcovery may not follow, which would end in their own puniſhment. They ſwear at him when his back is turned; nor is he a whit nearer his purpoſe by it; on the contrary, I have ſeen the brutal, half-ſavage diſpoſition ſoftened down into humanity, by tender and kind uſage, or even expreſſions, in his illneſs. Let the trial be only made, and I will anſwer for its ſucceſs.

What purpoſe does it ſerve, I would aſk, to threaten, and ſwear at a ſoldier for being reported ſick? If he be really indiſpoſed, he has a right to the indulgence of an hoſpital; if *ſconcing*, or *maligning*, as the term is, let his name be ſtruck out of the liſt without more words, as ſoon as the impoſition is detected, and let the ſerjeants of his company take care of the reſt. While the ſurgeon does not retain his name in the

the ſick report, it becomes their duty to ſee him perform his. But let it never be forgot, that an accurate examination of his complaints, whether pretended or real, is to be made before this ſtep be taken. We have touched, however, on this topic already. I am of opinion, this will do more to ſuppreſs ſconcing, or ſhifting of duty, for the ſake of a day or two's reſt in the hoſpital, than haſty paſſion; and every one will agree with me, that it is more creditable. But this behaviour, we hope, in regimental ſurgeons, is little practiſed, and the leſs need, therefore, of cautions for its prevention. Yet, in a work of this kind, it was thought proper to point out not only its bad tendency but abſurdity, ſince we have known it practiſed. In the army, whoſe laws are arbitrary, and abſolute, and where every one holds a command over another, from the top link to the bottom of the chain, even mild diſpoſitions will, in time, partake of this domineering infection, meerly from obſerving it conſtantly prac-

practiſed, and ſlide inſenſibly into the ſame. Surgeons ſhould be doubly careful to guard againſt it, who, from the nature of their profeſſion, ſhould, as the poet beautifully expreſſes it, never be found to want a ſufficient ſhare of "the milk of human kind-"neſs."

AGAIN, with regard to neglect when ill, nothing hurts a ſoldier more. He knows he pays for his medicines out of the ſmall ſubſiſtence which falls to his lot; that government likewiſe pays for a doctor to attend him when he needs it; and that, therefore, it is the ſurgeon's duty to viſit him regularly. It is well known, the ſervice is liable to hardſhips enough in health; the bed of pain ſhould be as well ſmoothed, and made as eaſy as poſſible. It is ſeldom a ſoldier who is well uſed, and has been for ſeveral years in the ſervice, deſerts his colours. As much lies almoſt in this department, as where the officers are concerned. Every department ſhould conſpire

to give him all the indulgence of which his ſituation can admit, and to act juſtly towards him. It is a pleaſant thing, either for a ſurgeon or an officer, to hear "*God* "*bleſs him!*" echo, in half whiſpers, through the ranks, as he paſſes along. It is the voice of applauſe—the plaudit of approbation—which publiſhes the performance of his duty, and which, if every officer, as well as ſurgeon, endeavours to deſerve, he will as aſſuredly receive.

A SOLDIER is far from ungrateful; he will oblige chearfully when it is in his power. Retaliation, we confeſs, ſometimes, alſo, marks his character. Unfeeling, ſevere, and inhuman officers, have often fallen in the day of battle, nay, on a review day, by the hand of ſome of thoſe whom formerly they have unmeritedly abuſed. On the other hand, officers deſerving to live, have been brought off the field in triumph, by a grateful ſoldier, at the hazard of his own life, when their wounds have prevented their

their retreat, and expoſed them to the danger of either being killed, or of falling priſoners into the hands of the enemy. The ſurgeon, like the reſt of the corps, is liable to incur the diſlike, or, by his prudent behaviour, obtain the approbation, and favour of the ſoldiery. His chief care ſhould be to deſerve the latter.

In different chronic complaints, where the patients, though kept in the hoſpital, are not confined to bed, the ſurgeon ſhould grant them as much indulgence as poſſible, with ſafety. This may not only gratify them, but may really conduce to the cure, by keeping their ſpirits up; for confinement to a ſoldier is a great bondage. The ſurgeon's great fear is of their irregularity, and their eating, and drinking now what is improper for their ſituation; for a ſoldier will hardly deny himſelf an indulgence of this kind, if it falls in his way, whatever be the nature of his complaint. Deſertion, alſo, we own, may ſometimes follow too great a licence;

licence; but as he is always allowed a corporal's guard for his hoſpital, he will have the leſs to fear from deſertion. The chronic patients often entreat permiſſion to walk out an hour or two in the heat of the day. This ſhould always be granted, when ſome material reaſons do not forbid; men ſuſpected of *ſconcing* ſhould be refuſed; when it is granted, they ſhould never be truſted without one of the men on guard to accompany them, leſt ſome ſcheme of deſertion be attempted. This is a proper caution on the ſurgeon's part, who muſt anſwer to the commanding officer for all the men under his care. When requeſts, however, of this nature muſt be refuſed them, let it be done with a ſeeming concern and reluctance; nor let the ſurgeon think it beneath him to add his reaſons. By this means, the refuſal will almoſt ſatisfy them as much as if he had complied with their wiſhes. In fair warm weather, they ſhould always be permitted to walk out, for ſome time, when it does not interfere with the means of cure.

cure. The exercise will keep up the languid secretions, induce cheerfulness, and render their situation more happy.

To maintain the better order and regularity in the hospital, the chronic patients should be under the command of a non-commissioned officer. It is seldom the sick list is without either a serjeant or corporal. The surgeon should take advantage of this, and give him the command in his absence. The soldier of the ranks always obeys a non-commissioned officer: the discipline of the army requires it. It is better to delegate this power to a serjeant or corporal than to the nurse, for they may then refuse obedience. By this means there will be a check on the disorderly, and turbulent; and the quiet of the hospital will be better preserved, a point sometimes very essential. I have been sent for, to considerable distances, merely to quell their disputes. It is on such occasions as this, that some severity, in order to preserve peace, *must* be shewn to indi-

individuals. In order to reſtore tranquillity, and prevent future quarrels, the ſurgeon is indiſpenſably obliged, however reluctantly, to confine, *i. e.* to ſend them under a centinel to the *black hole*, or commit them priſoners, with a written crime, to the officer on guard, who will return them to the commanding officer when he is relieved, with their crime ſtated in his reports; after which, the ſurgeon has it not in his power to releaſe them, but which he may do in the interim between the time of commitment and this: they muſt then abide by the ſentence of the field officer, or a court-martial; if the offence be of a nature to require it. As men in the hoſpital are never there without real complaints, the black hole, or returning them to the commanding officer, will ſubject them to a puniſhment too ſevere for their ſituation, this ſhould never be done but in emergencies. The black hole, where, perhaps, they may lie for days on ſtraw, without being undreſſed, and in a ſmall, confined, nauſeous ſpot, may not only

only tend to aggravate their complaints, but, from the cold they receive, aided by the medicines they were taking, may induce other diſeaſes dangerous to life: this ſhould be had in view, and, if poſſible, they ought not to be ſubjected to this ſevere puniſhment. To *clog* the offenders will do them leſs injury, and may be puniſhment ſufficient. They may lie on their beds, or ſit up in a corner, with the clog at their legs, without detriment to their health, till they ſolicit to have it removed, by a promiſe of good behaviour. But, on theſe occaſions, a ſurgeon ſhould judge cautiouſly, and never exerciſe his authority wantonly, or make the puniſhment ſeverer than the offence deſerves; nay, even overlook it, where the health of his patient might be affected thereby. There is even more ſeverity than may, at firſt ſight, appear from having a large clog of from fourteen to twenty pounds weight, locked on the leg for a day or more; beſides, there is an

igno-

ignominy united to it, which is felt ſometimes ſeverely by thoſe of ſpirit.

UNDER the head of tenderneſs, I may place a ſort of deception *abſolutely neceſſary*, ſometimes, to be practiſed; a deception of all others the moſt pardonable, and innocent, ſince it has for its object the welfare of the perſon on whom it is practiſed. A deception of this nature, if it deſerves the name, may occaſionally be practiſed, with the happieſt effects, to allay inordinate action of the mind, raiſe the drooping ſpirits, and remove inquietude, by confirming the patient's hopes, and ſeconding his wiſhes, in promiſing ſomething on which he may have riveted his affections, and placed his happineſs. This, perhaps, may be the only means to remove his diſeaſe. Beſides, ſometimes it may be in his power to perform promiſes of this kind.

A REMARKABLE inſtance of this nature happened in my practice, in the ſummer of 1781,

1781, while I lay in barracks at Tinmouth, in the North of England. A recruit, who had lately joined the regiment, named Edwards, was returned in the ſick liſt, with a meſſage from his captain, requeſting I would take him into the hoſpital,. He had only been a few months a ſoldier; was young, handſome, and well made for the ſervice; but a melancholy hung over his countenance, and wanneſs preyed on his cheeks. He complained of univerſal weakneſs, but no fixed pain. A noiſe in his ears, and giddineſs of his head. Pulſe rather ſlow than frequent; but ſmall, and eaſily compreſſible. His appetite was much impaired; his tongue was ſufficiently moiſt, and his belly regular; yet ſlept ill, and ſtarted ſuddenly out of it, with uneaſy dreams. Had little or no thirſt.

As there were little obvious ſymptoms of fever, I did not know well what to make of the caſe. I ſuſpected he might be under an incipient typhus, and ordered what I

judged neceſſary to obviate it. Some weeks paſſed with little alteration, either for better or worſe, except that he was evidently become more meagre. He ſcarcely took any nouriſhment, yet had hitherto ſat up out of bed ſome hours every day. At length, he became indolent; ſeldom ſat up at all; was conſtantly dozing, yet his ſleep never ſo ſound but he could anſwer when ſpoke to; ſighed deeply and frequently; nor could his attention be diverted to any external object. Something, it would ſeem, hung heavy on his mind. He never had any cough; yet, ſince he came into the houſe, had waſted away conſiderably. Exerciſe was recommended, and uſed as far as he could be rouſed to take it, which was never without reluctance. He was put on a courſe of ſtrengthening medicines; wine was allowed him. All proved ineffectual. His pulſe had changed with his appearance, and was now ſmall and quick; an evident fever of the hectic kind, as it ſeemed, with an evening exacerbation, took place. He had now been

been in the hoſpital near three months, and was become quite emaciated, and like one in the laſt ſtage of a conſumption.—Eyes were grown hollow; cheeks prominent; nails incurvated; adnata pellucid; and ſo weak in his limbs, that he could neither get in nor out of bed without help; of late, alſo, had night ſweats: in ſhort, I looked on him as loſt. On making my morning viſit, and enquiring, as uſual, of his reſt at the nurſe, ſhe happened to mention the ſtrong notions he had got in his head, ſhe ſaid, of home, and of his friends. What he was able to ſpeak was conſtantly on this topic. This I had never heard of before. The reaſon ſhe gave for not mentioning it was, that it appeared to her to be the common ravings of ſickneſs and delirium. He talked in the ſame ſtile, it ſeems, leſs or more, ever ſince he came into the hoſpital. I went immediately up to him, and introduced the ſubject; and, from the alacrity with which he reſumed it, yet with a deep ſigh, when he mentioned his never

more

more being able to ſee his friends, I found it a theme which much affected him. He aſked me, with earneſtneſs, if I would let him go home. I pointed out to him how unfit he was, from his weakneſs, to undertake ſuch a journey (he was a Welſhman) till once he was better; but promiſed him aſſuredly, without farther heſitation, that as ſoon as he was able, he ſhould have ſix weeks to go home. He revived at the very thoughts of it. At this time, however, I made a promiſe which I knew was not in my power to perform, without the conſent of the commanding officer, who alone can grant furlows; but, as my hopes of his recovery were very ſlender, my raſh promiſe could give me the leſs uneaſineſs, and my ſcheme was, to animate his hopes, and endeavour thus to take advantage of the change that his mind might undergo by it, to co-operate with me in removing, if poſſible, the malady.

It ſeems, he had requeſted leave to viſit his native place ſoon after he joined, but being only a recruit, and but a few months from thence, he was refuſed. This had hung on his ſpirits ever ſince; and from thence I now dated the origin of his illneſs. I entreated him to take food to ſtrengthen him for his journey; and, as ſoon as able, to go out into the open air a little every forenoon, when the weather would permit, that he might be the ſooner able to go home. He liſtened eagarly to every word I ſaid. In ſhort, his appetite ſoon mended; and I ſaw, in leſs than a week, evident ſigns of recovery. He was now lively, though ſo weak that he could not yet get in or out of bed without aſſiſtance; he ſtrove to ſit up; two men took him between them in the heat of the day, and placed him on a ſeat they had erected for him on the beach, where he had a view of the ſhipping, for it was on the ſea coaſt. In a little time he was able to walk. Every viſit I paid him he re-

reſumed the ſubject of *the furlow*, which I perſiſted in promiſing, ſeeing the good effects it had already produced; and in leſs than two months from the time he had received this promiſe, he was able to leave the hoſpital, and go to his barrack-room. I ſet myſelf about endeavouring, as far as in me lay, to accompliſh his furlow; for he paid me almoſt daily viſits, aſſuring me he was able to undertake his journey, if I would allow him; for he firmly relied on my word. I was in ſome dilemma now how to act. Yet his ſtory was already known throughout the regiment, and the imminent eſcape he had from death. The deception, however, if I had dropped it here, was tenderneſs, and a regard for his recovery; but I went farther; I made public, to all the officers, the method I fell on to recover him, and told them, moreover, that if I did not ſucceed in obtaining him a furlow, I was ſure he would relapſe, as ſoon as he underſtood his expectations were to be fruſtrated. I won them over to my intereſt.

The

The ſtory was publicly talked of; the commanding officer was likewiſe acquainted with it; and the requeſt was now made to him, which he obligingly granted.

NOSOLOGISTS mark out to us a certain diſeaſe, under the name of *noſtalgia*, or a longing after our native country, or home. If the foregoing caſe comes not under that head, I know not under what genus to place it.*

DR. ZIMMERMAN, in a work of his (Experience in Phyſic) which I have peruſed ſince the above was written, ſays, the Swiſs are

* IN Dr. Cullen's Noſal. G. 106, this diſeaſe is characterized in the following words :—" Noſtalgia.—In " abſentibus a patria, vehemens eandem reviſendi de- " ſiderium." This eminent profeſſor has marked two ſpecies of the diſeaſe in the laſt (4th) edition of his work.—" 1. Noſtalgia *(Simplex)* ſine alio morbo.— " 2. Noſt. *Complicata*—aliis morbis comitata." Sauvages has done the ſame. Vogel conſiders the diſeaſe as a ſpecies of melancholy, and has given it a place in his Noſology as ſuch.—Vid. G. 332. His words are, —" *Melancholia*—Inſania longa cum mæſtitia ac ti- " more.—*Noſtalgia* ejus ſpecies eſt."

are extremely ſubject to fall into this ſpecies of melancholy when in a foreign country. It ſometimes, he tells us, proves fatal in a ſhort time. Barrere has ſeen it in ſeveral Burgundy ſoldiers, who were forced into the ſervice, or refuſed their diſmiſſion. Dr. Auenbrucker, has alſo frequently obſerved it in young people, who had been enliſted by force, and deſpaired of ever ſeeing their home and friends again. They were firſt ſilent, languid, penſive, emitted deep ſighs, ſeemed exceedingly ſorrowful, and gradually became inſenſible to every thing. Among the Auſtrian troops, the ſame author tells us, it was formerly very frequent, but it is now extremely rare, ſince a plan has been adopted for enliſting ſoldiers only for a certain number of years, and diſcharging them when this time is expired. " I believe," adds Dr. Zimmerman, " it will be found " among men of every nation, who, in " foreign countries, feel the want of thoſe " delights and enjoyments they would meet " with among their friends at home.—In " ſhort,"

" ſhort," he goes on, " every Swiſs feels, as " I do, the *noſtalgia*, under another name, " though at *home*, whenever he thinks he " ſhould live better in any other country." Dr. Auenbrucker obſerved, that in ſeveral who died of this diſeaſe, the lungs adhered to the diphragm, and that ſome part of the lungs was indurated, or was even become more or leſs purulent; and I am happy to find, the method of cure he relies on is the ſame I adopted in the above inſtance. When the diſeaſe has not degenerated into phthiſis, or *madneſs*, wonderful effects have been produced in patients, by inſpiring them with the hope of ſoon ſeeing their friends and their home again. Dr. Zimmerman relates an inſtance of its good effects on a Swiſs of the canton of Berne, who ſtudied phyſic at Gottengen: he fancied that his aorta was about to burſt, and could not be prevailed on to ſtir out of his chamber. About this time his father ſent for him home; he then ran over all Gottengen, with the greateſt joy and alacrity, and took

leave of all his acquaintances—yet, two days before this, he was hardly able to get up a little ſtair-caſe, without being in danger of ſuffocation! His father afterwards ſent him to the univerſity of Baſil, and from thence to the French part of the canton of Berne, the fineſt country in Europe, ſituated along the lake of Geneva. Here he was again attacked with the *noſtalgia*: he is now, he adds, in perfect health.

I KNEW an inſtance myſelf this ſpring (1786) ſomewhat ſimilar to this, in a young lady at a boarding-ſchool. She was of a delicate make; and though the confinement in ſchool was by no means ſuch as could much injure her, had ſhe liked her ſituation, which ſhe did not; yet ſhe became cahectic, had a cough, which forced up ſtreaks of blood, her legs and ancles ſwelled, and ſhe was on the brink of a phthiſis pulmonalis. She was removed from ſchool (where ſhe never thought herſelf happy) to her great ſatisfaction, and ſoon perfectly reco-

recovered. This uneaſineſs to live at home preyed on her health, and, perhaps, at length, might have induced conſumption, and death.

We every day hear of people dying of *broken hearts*, as it is expreſſed, *i. e.* of a depreſſion of ſpirits, occaſioned by diſappointments of various ſorts. Perhaps they may all be placed under the ſame head.

In the beginning of the ſame year, I aſſiſted at the diſſection of a ſoldier, in Newcaſtle upon Tyne, of the South Lincoln militia, who, the ſurgeon aſſured me, had died of love. Before his death, he was likewiſe greatly waſted; ſo that his caſe might be ſtiled *atrophia*. Like Edwards, whoſe caſe we have related above, he had no cough, but nightly ſweats, and exacerbations of fever. He took little or no nouriſhment, and, in other reſpects, was very ſimilar to our patient. That he died from the effects of this depreſſing paſſion, all the

corps

corps to which he belonged agreed, ſome of whom knew his attachment before the regiment marched from their own country to this. Perhaps ſimilar means, *i. e.* a deception, by raiſing his ſpirits, and cheriſhing his hopes, till time and new objects could have effected a change, might have ſaved his life.

I BELIEVE every one is agreed that this is to be placed among the melancholy paſſions. Sometimes it acts ſuddenly, and violently; at other times, like intenſe grief, it gradually undermines the conſtitution. The more general effects of this tender paſſion are, a tremulous pulſe, deep ſighs, an alternate glow and paleneſs of the cheeks, dejection, loſs of appetite, a faultering ſpeech, cold ſweats, and watchfulneſs, which gradually terminate in conſumption, or, perhaps, induce inſanity, and ſometimes ſuicide. Richardſon, in his Clariſſa, has well deſcribed the effects of this paſſion. Tulpius gives us a curious inſtance of its effects;

effects: the ſubject of the caſe was a young Engliſhman, who met with a refuſal from a lady. He became perfectly rigid, and motionleſs, ſitting in the ſame attitude with his eyes open, and appeared rather like a a ſtatue than a human being; he continued in this poſture till night, and then, being told that his miſtreſs yielded to his paſſion, he roſe inſtantly, as if from a profound ſleep, became more cheerful, and ſoon recovered.*

The above caſes prove, the vaſt influence the paſſions have over the body, and how much it is incumbent on the practitioner to ſtudy the ſprings of the mind, as the ſource from which he is to deduce the cauſes of many diſeaſes, and take every advantage for their removal, which an inveſtigation of theſe may put in his power.

To conclude, the more our minds are diſpoſed to do good to mankind in general, the

* Vid. Zimmerman ut ſupra.

the more will we be inclined to exerciſe the virtue of tenderneſs and care towards our patients in particular; and I am convinced our ſucceſs, in many caſes, will keep pace with ſo meritorious a conduct. Every practitioner, who has for any time been converſant with ſick people, will ſoon ſee, that to his own behaviour, in this reſpect, he may attribute much. I am perſuaded, he will find this obſervation applicable, whether his practice be in the confined circle of a regimental hoſpital, or in the more enlarged ſphere of an extenſive neighbourhood.

CHAP. IV.

Surgeons cautioned from ſpending too much Time in Amuſements with the Officers, leſt they thereby neglect their Duty; and of the Impropriety of granting them double Commiſſions.

THE manner of living in the army ſubjects to many temptations. Men here always in a ſociety diſtinct in itſelf, and having little connections with the reſt of mankind, though dwelling in the midſt of them; at a diſtance from friends, and, therefore, the leſs check on their behaviour; among companions of various diſpoſitions and tempers, with whom they are, in ſome meaſure, obliged to aſſociate; and theſe, for the moſt part, young, and with their paſſions in their utmoſt vigour; together with the gaiety and levity with which they ſee themſelves

ſelves every day ſurrounded, all which conſpire to baniſh care, as well as ſerious reflection. Yet all this, though pleaſing for the preſent, will depart, " like the baſeleſs " fabrick of a viſion." It will, therefore, demand the ſurgeon's utmoſt prudence and fortitude, whoſe duty obliges him to reflect more than the reſt of the corps, to obſerve a proper circumſpection under theſe circumſtances; nor will he find it an eaſy matter ſtrictly to adhere to good reſolutions, though entered into with earneſtneſs, or reſolved to be followed with the ſtricteſt punctuality.

I DO not mean here, that the ſurgeon ſhould avoid the company of the officers, or yet ſhun ſociety at proper ſeaſons, or ſeem moroſe, or affect a gravity unnatural for his years, and unmeaning in itſelf; this is equally as bad as too much levity, ſince it may induce a diſagreeeable ſeverity of temper, by no means laudable, and point him out as an oddity, and a butt for the the younger men to exerciſe their wit on; but,

but, my meaning is, that he ſhould endeavour to find the middle point between ſhunning, and courting their company; between the folly of too much levity, and an affected ſtiffneſs. As their purſuits as well as duty, and thoſe incumbent on him, are ſo oppoſite, the leſs time he ſpends with the officers, the more will remain for the ſervice of his patients. He will have the more leiſure to peruſe authors who have written on the diſeaſes he may then have under his care; or to commit to writing ſuch obſervations as the caſes may have ſupplied him with, for the improvement of his future practice. This will be a ſufficient apology for his appearing ſeldom with them, either in ſauntering about the ſtreets, and fields, or in their other parties of pleaſure.

Every officer will reſpect a ſurgeon of good behaviour, and diligence in his profeſſion. Every officer either does, or ought to treat with contempt, the contrary conduct. I am of opinion, how harſh ſoever

the expreſſion may ſound, that a negligent ſurgeon ſhould be conſidered among the corps in the ſame light as they hold a *coward*. He ſhould be avoided as a diſgrace, not only to them, but to the ſervice; nay, to humanity. From whatever cauſe it proceeds, it ſhould be marked with ſome ſtigma of reproach, ſome public token of diſapprobation. When an officer behaves either in a *cowardly*, or otherwiſe ignoble manner, he is ſent, as they call it, to *Coventry*, *i. e.* none of the corps will either ſpeak to him, or ſuffer him to aſſociate with them, till he makes a proper apology for his behaviour, if it be ſuch as can admit of an apology. I could wiſh the ſame law was to extend to the ſurgeon, if ever he is detected in neglecting the ſick, or other ill treatment. As to his not aſſociating on all occaſions with the officers, which we wiſh here to inculcate, the reflecting part of the corps will never blame him, nor treat him as of leſs conſequence for being ſeldom of their parties. A greater

cauſe

cauſe of complaint they will have, if he acts a contrary part.

BESIDES, to uſe the words of an eminent author,* "our attention becomes more "perfect by the advantages we derive from "a habit of obſerving. The mind ſatisfied "with its former diſcoveries, becomes al- "ways more deſirous of improvement, in "proportion as it extends its knowledge." for it is certainly true, that "ſcience is "the clue by which the phyſician" (an army ſurgeon, as we ſhall endeavour to ſhew afterwards, ſhould poſſeſs the knowledge of the phyſician) "is enabled to penetrate "into the labyrinth of nature."

IS it to be ſuppoſed the ſurgeon who paſſes his mornings in walks of recreation, or the day in ſports, and the evening, when the bottle does not intervene, at cards, billiards, or back-gammon, can have the complaints of

* VID. Zimmerman on Experience in Phyſic.

of his ſick ſoldiers much at heart? Without application he never can become tolerable, much leſs eminent, in his profeſſion; for it is a wide field, and requires much cultivation. But if time be miſpent as above, what remains for ſtudy? When he ought to read, or be engaged in reflecting on, and inveſtigating the cauſes of diſeaſes, perhaps he is amuſing himſelf in the fields, if the weather permits, with ſome of the corps; or, inſtead of cultivating the reciprocal and profeſſional communications of his brother ſurgeons, or other medical friends, and receiving and giving inſtructions, the hazard-table employs no ſmall ſhare of his time.

It is not meant by this, that recreations are entirely to be forbid—far otherwiſe: a proper ſhare of relaxation, like ſleep to the body, will render the faculties of the mind more vigorous. It is too ſerious a matter, however, to ſpend a whole life in paſtime. Recreation, then, may be taken even daily to a moderate degree; but, ſurely,

ſurely, reading and reflection ought not to be neglected. A mechanical routine of practice is of all others the moſt contemptible, whether in or out of the army. A man who has only one preſcription for all diſeaſes, is a quack to all intents and purpoſes; nor is he leſs one, whoſe head is ſtuffed only with preſcriptions. A mechanical routine, alſo, it muſt be, unleſs a certain portion of our time be dedicated to the peruſal of books, the examination of the progreſſive improvements made in the ſcience, and the careful obſervation of phænomena at the patient's bed ſide.

"WITHOUT ſound judgement," ſays a reſpectable author,* "the poſſeſſion of a "multiplicity of preſcriptions is not merely "uſeleſs, but likely to be of dangerous "conſequence. If a man had a whole diſ-"penſary by heart, which contained the "moſt excellent preſcriptions for all diſ-"eaſes,

* VID. Coe on Biliary Concretions, &c. p. 238.

"eaſes, but had not underſtanding ſufficient "to diſcern the particulars of caſes, and the "difference of conſtitutions, and to vary "his method accordingly, he would ſtill "be as unfit to practice phyſic, as a man "who had learned the terms of art, and "the common rules of navigation, but had "never been at ſea, would be to direct the "management of a ſhip in a ſtorm, or "among rocks, or upon dangerous coaſts."

It is a common adage, that a man will ſoon partake of the manners and behaviour of his company. Their purſuits, their amuſements, their inclinations, will become ſimilar, as well as their converſation. Whatever be the leading paſſions of thoſe we have been long intimate with, we fall inſenſibly into the ſame. This rule holds as well in virtue as in vice. Hence the utility of good examples in forming and directing this bias of the mind into a proper path; and hence, alſo, the pernicious effects of bad examples in producing the oppoſite diſpoſition.

It

It is from conſidering the power of habit on the mind I have ventured theſe reflections; but I ſhould be ſorry to have it underſtood as inſinuating any thing to the prejudice of officers. The concluſion I wiſh to draw is only this, that the more we converſe and aſſociate, in our leiſure hours, with thoſe of our own profeſſion, the more will our minds be attached to it, and *vice verſa*.

And this leads me to the diſſuaſion of granting ſurgeons double commiſſions, viz. that of both ſurgeon and officer. The ſame arguments we have already uſed againſt aſſociating too much with the officers, to the prejudice of our patients, and diverting our attachment, and the alienating our mind from our profeſſion, may be applied here, with this addition, that the ſurgeon has not only now a double duty to perform, but, inſtead of optional, as it was before, is now neceſſitated, from the nature of

of this additional commiſſion, to be more frequently with the officers.

THOUGH an officer may be ſaid to ſpend an idle life, when compared to ſome other profeſſions requiring a greater exertion of the mental faculties, yet, the duties he muſt keep himſelf in readineſs to perform, abſorb a great ſhare of his time. Parades muſt be attended; guards muſt be mounted; attention muſt be paid to dreſs; attention to the behaviour of the men; attention to their diſcipline; with many other things of this nature, known only to gentlemen of the army.* In the whole courſe of the day, there is very little time they can entirely call their own, *i. e.* they muſt never be far out of the way, and muſt be always in readineſs. The ſurgeon, in common with the other ſubaltern officers, if he enjoys an officer's commiſſion, muſt take his ſhare of this duty; indeed they will inſiſt

* I SPEAK here always of the foot ſervice.

inſiſt on his taking it in turn. For, why ſhould he not, ſince he enjoys the benefits ariſing from it? The duties of a ſurgeon, which, in general, we may call of far greater magnitude, he muſt alſo perform. But here we find the ſame danger and temptation of having the mind alienated. The application neceſſary for the former is ſmall, when compared with what is abſolutely neceſſary for the latter; and the unhappy patients, we fear, will likewiſe have reaſon to regret it.

I REMEMBER to have ſeen an inſtance of this in a militia corps, where the ſurgeon, who was alſo an acting officer, was detached from the regiment with the company to which he belonged, on a ſeparate command, not in a medical, but a military capacity. A mate, in theſe corps, has likewiſe two commiſſions: both may be detached at the ſame time on different ſtations. When this happens, what becomes of the ſick of the reſt of the regiment? Theſe commands

may be longer or ſhorter, according to the nature of the ſervice: it may be, a day; a week; a month, &c. Suppoſe, on this occaſion, he could perſuade a brother officer to go in his ſtead, the commanding officer may not on all occaſions be inclined to allow ſuch change of duty; he may inſiſt, that the *roaſter* be regularly filled up, and every one take his turn. I have known a commanding officer refuſe a change of duty. His word is abſolute. Right or wrong, it muſt be complied with, without any attempt to reaſon on the ſubject.

In the regular ſervice, double commiſſions, of late, have been forbid, perhaps for ſome ſuch reaſons as theſe I have given. In the militia it is univerſally practiſed. The reaſon given for it is, that as this ſervice is of a limited duration, for the war only, and ſurgeons there not entitled to half pay on diſmiſſion, a ſecond commiſſion is granted as a kind of recompence; and properly, if it was underſtood as a perquiſite; but, we appre-

apprehend, not for the good of the medical part of the ſervice, in the manner things are at preſent conducted. No two profeſſions whatever are more oppoſite in their natures, than that of a military and medical gentleman: the reaſon has already been pointed out. We all know, that the engagements of an officer require not much ſerious reflection; the medical man's duty requires it almoſt conſtantly.

If it is thought improper in the regular, may we not with propriety aſk, why it is continued in the militia ſervice? Have the ſurgeons there leſs to do in a medical capacity than the ſurgeons of the regulars?

In place thereof, we ſhall find, on enquiry, the contrary, ſince the militia regiments are, in general, *ſtronger* than the regulars, *i. e.* more numerous; and it muſt follow, that, in proportion, there will be more ſick. The regular regiments are ſeldom compleat; the militia are, for the moſt

moſt part, compleat; becauſe they can oblige the county to procure the complement of men, while the regulars muſt recruit by ſlow degrees, and chance, at various diſtances and diſadvantages. Although theſe are confined to England alone, while the regulars are obliged to march wherever the ſervice requires, yet England is as much ſubject to diſeaſe as many other parts of the Britiſh dominions. Intermittents, and other febrile affections, rage in many parts of it endemically, as much nearly as in Holland. The militia are ſubjected both to camp and garriſon duty, equally with the regulars, and, therefore, as liable to camp diſeaſes; and theſe have, we know, often appeared among them, with all the violence they are generally obſerved to produce.* The venereal diſeaſe, that great plague of the army, is not found leſs frequent in England than in moſt other parts of Europe. Do not all theſe call for a ſteady

* Vid. Œconom. Obſ. on Mil. Diſ.—1764.

ſteady and regular attention, which cannot be ſo well given by a ſurgeon whoſe mind and time are divided between two profeſſions, ſo oppoſite as theſe to each other?

I WOULD not be underſtood, by what I have ſaid, as taking from the militia ſurgeons a perquiſite, if this ſecond commiſſion is to be conſidered as ſuch. If it be thought, that a ſurgeoncy of militia, on the ſame footing with the regulars, is not an equivalent to the other's chance of half-pay, let ſome other ſcheme be deviſed to make up the deficiencies; or, if this is ſtill to be continued, let it be underſtood as a *ſine cure*, and no duty required from the ſurgeon to call his attention from the ſick. It may be eaſily ſo regulated, that the duty ſhall fall on the reſt of the ſubalterns, in the ſame manner as we find it among the regulars, when any of the officers are on the recruiting ſervice. In this way there can be no objection to the augmentation of his pay, by an enſign's or lieutenant's commiſſion; for,

for, I have been of opinion, ever ſince it was my lot to be acquainted with the ſervice, that the regulations, in this reſpect, of the regimental medical practice, I mean in as far as relates to pay, is neither adequate to the trouble of the office, the expences of a liberal medical education, or, what is of equal conſequence, is not ſuch as to encourage men of any profeſſional abilities to enter into it. Till regimental practitioners are placed on a more honourable footing, and their rank promoted, as well as pay encreaſed, few, who deſerve the name of medical practitioners, will engage in it. According to the ſyſtem now in uſe, it matters not what their abilities are. The literate and illiterate are equally rewarded, or, more properly ſpeaking, not rewarded at all. Since merit here can ſeldom diſtinguiſh itſelf, ſome other aids ſhould be called in; and theſe ſeem to be rank and pay, the only things in the army that can command reſpect, or attention; and without theſe, his uſefulneſs can never be ſo great.

If a man, not only in this, but in any other walk of life, who truely from his merit deſerves attention, inſtead thereof finds neglect, it is apt to induce in him a real negligence, " he may deſpiſe thoſe " who are to be his judges, and ſlacken his " endeavours, equally indignant either of " their applauſe or reproach."

I do not conceive the following opinion of the late eminent Dr. Hunter can apply in our ſubject, though I am ready to allow it all due weight out of the army, and that chiefly from conſidering the nature of a regimental ſurgeon's ſituation, as already explained. He ſays, " An opinion, the " child of ſpleen and idleneſs, has been " propagated, which has done infinite pre- " judice to ſcience, as well as virtue. They " would have us believe, that merit is ne- " glected, and that ignorance and knavery " triumph in this world. Now, in *our* " *profeſſion*, it ſeems inconteſtible, that the " man

" man of abilities, and diligence, *always*
" *ſucceeds*. Ability, indeed, is not the only
" requiſite; and a man may fail, who has
" nothing beſides to recommend him; or
" who has ſome great diſqualification, either
" of head or heart But ſick people are ſo
" deſirous of life and health, that they al-
" ways look out for ability; and, ſurely,
" the man who is not really able in his pro-
" feſſion, will have the leaſt chance of being
" thought ſo. In my opinion, a young man
" cannot cultivate a more important truth
" than this, that merit is ſure of its reward
" in the world."*

ENCOURAGEMENT, however, is moſt certainly the pabulum of genius; it keeps emulation alive. Juſt praiſe animates. There are few who have not felt this. To withhold it where due, is like froſt to the tender bud, which blaſts the hopes of ſpring, and proves untimely deſtructive.

CHAP.

* VID. Introd. Lect. p. 102.

CHAP. V.

Of Intoxication—of its greater Criminality in the Surgeon, than others of the Corps.

IN the army, where ſo much conviviality reigns, it will be ſaid, that to avoid intoxication, and even frequent intoxication, is no eaſy taſk. This, however, I would, in a great degree, deny. I know, from experience, it may be avoided, whether by the officer or others; and, I am confident, it ought, on every occaſion, by the ſurgeon. We acknowledge, there is more temptation in the army to intoxication, than in ſome other ſituations of life, but it is not greater than what prudence and firm reſolution may overcome.

THERE are few vices that bring their own puniſhment more ſpeedily after them

than drunkenneſs. Every man will, in general, be reſpected according to the reſpect he has for himſelf. A drunkard has none for himſelf, and, therefore, ought to be left by the world without any.—But, to proceed.

The ſurgeon generally meſſes with the corps: on this account, it will be ſaid, he may be more liable to temptation, and frequently compelled to drink more freely than he might otherwiſe chuſe; but I am unwilling to admit even this. Every man in theſe ſocieties, as far, at leaſt, as my knowledge or experience goes, may drink (particular occaſions excepted) either in quantity or quality, what he chuſes. Every man may likewiſe retire when he judges it convenient; for no perſon ſeems to take any notice, though all the company obſerve it. This is true politeneſs, and ſtrict good breeding. It muſt, however, be acknowledged, that all are not poſſeſſed of proper reſolution, or government over their incli-

inclinations, to make this good uſe of the latitude the company grant.

THOUGH I have ſpoken thus far in favour of the good breeding ſubſiſting in the army, yet, I muſt own, there is, though not a direct, a ſtrong indirect temptation to lead us into this vice, *i. e.* the hilarity that always ſubſiſts among a number of gentlemen, ſuch as always meet together at a meſs; the pleaſantry that paſſes to and fro among them, where every one contributes his ſhare to enliven the hour; good wine, which produces good ſpirits, even among the dull and phlegmatic; together with uſe, which improves the reliſh for liquor: theſe, I ſay, are temptations, which even the moſt guarded are not always able to reſiſt—glaſs after glaſs paſſes, and one ſally of wit after another flies round the table, which inſenſibly ſteals away our time, while the liquor itſelf never fails, in proportion, to ſteal away our ſenſes!

"OF all vices," ſays the author of a ſhort eſſay lately publiſhed in a morning paper, "take heed of drunkenneſs. Other "vices are but fruits of diſordered affec- "tions; this diſorders, nay, baniſhes reaſon. "Other vices but impair the ſoul; this "demoliſhes her two chief faculties, the "*underſtanding* and the *will*. Other vices "make their own way; this makes way "for all vices. He that is a drunkard is "qualified for all vice.

"MANY a ſoul, with great difficulty, "lugs on a wretched and worn-out carcaſe "to its daily rendezvous, who, perhaps, for "many years, has been nothing elſe but the "vintner's conveyancer, to carry his liquor "between the *tavern* and the *wall*."

AN officer may ſit undeſerving of re- proach, and enjoy his company, provided he does not ſit till intoxication overtakes him. His duty is at regular, ſtated periods; he

he knows when his turn comes, and will be prepared accordingly for it: beſides, it is of that nature which neither requires, nor enjoins much abſtinence. But it is far otherwiſe with the ſurgeon: his duty is at no ſtated hour; he is liable to be called out on all occaſions; it may be, for aught he knows, the next moment. Should he be found incapable to perform it from drunkenneſs, I know of no puniſhment in the catalogue of martial laws too ſevere for him. Or, ſuppoſe he ſhould not be called out from company, but left to retire of his own accord, when he finds himſelf growing intoxicated, he may, at this very improper time, through a ſort of half recollection of what he intended in the hour of ſobriety, viſit ſome of his patients; may attempt to compound them medicines; and, in this ſtate of want of ſound judgement, commit eſſential miſtakes. I have known accidents ariſe from this ſource, though, I thank heaven! never any of a ſerious nature. Yet, from the probability that ſuch

may

may take place, I am juſtifiable, in an eſſay of this nature, in mentioning it.

I REMEMBER once to have ſeen a brother of the profeſſion, in a ſtate of too much elevation from wine, unluckily apply ſo large a quantity of ſach. ſat. as a repellent, to a perſon's groin, where a trifling excoriation, from too much walking and the heat of the weather, had happened, that the conſequence was a gangrene, which could not be removed without conſiderable trouble, and even, for ſome time, rendered the patient's life doubtful.

IN the beginning of 1783, I met with an account of a melancholy accident from intoxication, which, though it does not reſpect the faculty, I may be allowed to relate, as it is a farther proof of the pernicious effects of this vice, in thoſe to whom any truſt is committed. This accident happened in the hands of a nurſe to a lying-in woman. About ſeven days after the lady had

had been brought to bed, the child grew ſomewhat indiſpoſed. The phyſician was therefore conſulted, who ordered it a doſe of gentle phyſic. It was the nurſe's buſineſs to adminiſter it. Unhappily for the infant, ſhe was intoxicated, and, in place of giving the medicine put into her care, in this ſtate of inſanity, ſhe gave the child a doſe of oil of thyme and laudanum, which had been prepared for an application to a bruiſe. The tender babe, as might reaſonably be expected, could not long ſurvive ſo fatal a potion. May we not aſk, whether an intoxicated preſcriber would not have been as apt to commit an overſight in compounding medicines, as an intoxicated nurſe in adminiſtering them? In this ſtate they are both equally deprived of ſound judgement, and, therefore neither of them to be implicitly depended on; but, ſhould they voluntarily bring themſelves into this condition, it would ſeem but juſtice to the public, to make them anſwerable, when ſober, for their errors.

A PRO-

A PROPER degree of puniſhment might be followed with happy effects in preventing ſuch to whom public truſts, of ſo material conſequence to the happineſs of individuals, are committed. With reſpect to it among army ſurgeons, not only individuals, in this way, may ſuffer, where theſe are found addicted to this vice, but the public ſervice, and, therefore, the puniſhment would ſeem to demand even a higher degree of ſeverity.

I HAVE heard it urged in commendation of the abilities, as they expreſſed it, of certain perſons of the profeſſion, both *in* and *out* of the army, that they preſcribed beſt when half drunk; nay, contended for the truth of it. Such commendation, however, is the effect of ignorance—it ſhould be reprobated—it is miſplaced praiſe, and may prove injurious occaſionally to the welfare of ſociety. Will any man be ſo hardy as to maintain, that a madman can per-

perform what requires the united force of reaſon and experience? Can a man diſpoſſeſſed of his reaſon cooly ſit down, and give rational judgement in matters of life and death? and are not the inſtruments of this ſort immediately in the hands of a preſcriber, by his prudent management of which, he may reſtore health, but by his imprudent uſe do much evil, if not even induce death? But the preſcriber has not in this moment, when his aſſiſtance is called for, that ſhare of reaſon left which the part he is about to act requires. No man, I am confident, would be ſo regardleſs of his own ſafety, as to truſt his barber in the ſame condition. Is it becauſe a ſurgeon knew ſufficiently well how to adminiſter medicines when ſober, that he can do the ſame when drunk? If we were affraid of our throats in the above caſe, we have ſurely no leſs reaſon to tremble for the conſequences in this. The ſimilitude may be called coarſe, but it is *certainly* appoſite. Every one knows that ſeveral of our moſt valuable

medicines are poiſons, and ſome of them both active and fatal, in improper doſes.*

CHANCE may, for a time, guide the one's hand right; and alſo the other may, in one of thoſe drunken moments, happen to make up a good compoſition. To ſuppoſe this, is juſt within the verge of poſſibilities. None, however, will undertake to aſſert, that the ſame will repeatedly take place under the ſame circumſtances. If this mode of reaſoning be convincing, which, I flatter myſelf, it is, at firſt view, I hope none will be found hereafter ſo imprudent as either to maintain, that an intoxicated phyſician or ſurgeon can perform the duties of his employment ſo well, much leſs *better* than when ſober, or to truſt themſelves under his care at ſuch a time, if they can avoid it.

To

* MOST medicines, indeed, are poiſons, though all poiſons are not medicines, as an ingenious author has expreſſed it.

To praiſe a medical man for his ſagacity, and diſcernment in his profeſſion when drunk, is certainly the ſevereſt ſatire on him we can employ, and reprobates him in the moſt pointed and forcible terms. The opinion of the ingenious Armſtrong, reſpecting people in this condition, is very far from ſuch ill-placed praiſe—Hear him on the ſubject—Speaking of drunkenneſs, he ſays,

" Or in the rage of wine your haſty hand
" Performs a deed to haunt you to your grave."

Here he points out, how likely a man in this condition is to commit what he may repent to the lateſt hour of his life. He continues—

" Add, that your means, your health, your parts decay;
" Your friends avoid you; brutiſhly transformed,
" They hardly know you; or if one remains,
" To wiſh you well, he wiſhes you in heaven."

ART OF PRESERVING HEALTH.

Caution and accuracy, eſſentials in the profeſſion, we cannot in this condition expect.

A PER-

A PERSON lately talking on this ſubject with me, declared as a fact, that in a certain late practitioner, a man of conſiderable judgement, when not inebriated, this vice was ſo conſpicuous, as frequently to give juſt alarm to the apothecary who compounded his preſcriptions. So addicted to it did he become, that, in viſiting patients, he would refuſe to preſcribe till they brought him liquor. The neighbourhood entertained an high opinion of his abilities, and ſcrupled not to make the ſame apology for him we have already mentioned—that he preſcribed beſt when almoſt intoxicated. In part, we will here allow, this might be fact; for, perhaps, till he had drank a certain quantity, to give ſome ſtimulus to his cold and languid nerves, he was unfit for any thing, as moſt habitual drunkards are. Lo, the conſequence! every day the cup muſt be encreaſed to produce the ſame effects. His apothecary, who, I am told, was a man of diſcernment, and who entertained

tained a friendſhip for him, has called on him after a fit of his intoxication, and ſhewn him, in confidence, the preſcriptions he had written while inebriated.—He has ſtarted when he read them; and, my informer adds, has bleſſed God, and thanked the apothecary, that they had not been ſent to the patient.—The example being thus held up, we hope, may deter others from an imitation, and prove as a beacon to prevent them from ſplitting on the ſame rock, or falling into this dangerous error beyond the bounds of moderation.

That perſons in liquor, without heſitation, have done what would puzzle others as well as themſelves, nay, what they would have refuſed to attempt when ſober, I grant. Liquor gives an irregular flow to the ſpirits, which produces raſhneſs; but this is the very thing againſt which we have been ſo bitterly inveighing. Something may be done *now*, and, by *chance*, even *happily* done, which ſobriety would have been

been cautious in undertaking. Perhaps the following fact may apply as an example. The reader may rely on its truth.

A GENTLEMAN of the profeſſion, an acquaintance, went, at my requeſt, one evening, in autumn, 1781, to ſupply my place, in delivering a woman, particular buſineſs obliging me to leave her, though then in a critical ſituation. It ſo happened, that he had this day made ſomewhat free with the glaſs; yet not ſo much, in my opinion, as to incapacitate him for this or any profeſſional duty. It happened to be a footling caſe. He ſet about it without heſitation, or once reflecting, that it was proper to bring down the arms into the birth before he proceeded to deliver. Notwithſtanding this, the woman was ſafely brought to bed, without the leaſt accident either to herſelf or child. In moſt caſes, both arms of the infant might have been broken, or ſome accident happened to the mother; or, from neglecting to turn the

the child in a proper poſition to allow the head to paſs the pelvis with the moſt eaſe, the conſequence might have been other miſchiefs. That ſome or all of theſe did not take place, ſeems to be owing to nature, who, in this woman, had fortunately formed the pelvis, &c. of a larger capacity, and the child ſmaller, than common. She knew nothing of the danger of her eſcape, but concluded the buſineſs done with the greateſt judgement; and next day, on my viſiting her, beſtowed large encomiums on the accoucheur I ſent.

So it fares with others. If a man, during the effects of the glaſs, ſhould chance to ſucceed in any part of his profeſſion he undertakes, his employers will call him again, whether drunk or ſober. The gentleman I allude to in the above caſe, was ingenuous enough to tell me of it, and blame himſelf for the raſhneſs of his attempt, and the danger he ran of doing miſchief while ſo heated with wine; nor will

will he be offended to ſee it held up here, as a *caveat* to others. Perhaps we conduce to the progreſſive improvement of our profeſſion as much, if not more, in confeſſing our miſtakes, as by publiſhing our ſucceſs. The quack, to vend his noſtrum, trumps in every newſpaper thoſe caſes where accident has rendered it ſucceſsful; but as cautiouſly avoids telling the world the many *hundred lives* it has deſtroyed.

As the colonel is the head of the corps, the father of the family, ſo to ſpeak, or, in his abſence, the lieutenant-colonel, or major, it were well if whoever of them poſſeſſes the command, would take this ſubject under their more immediate conſideration. A ſoldier is ſeverely puniſhed for drunkenneſs; why not extend it to other departments, where its miſchievous effects may prove even of more magnitude? The vice in this department, as we have endeavoured to ſhew, may be followed by more unhappy con-

conſequences than may follow from the drunkenneſs of a private ſoldier.

SOMETHING of this nature might, perhaps deter them from it, viz, that for every offence of this ſort, *i. e.* for every time they were intoxicated, they ſhould forfeit a certain number of days pay, to be added to the fund for ſick wives of the ſoldiery before mentioned. A fine ſhould, in like manner, be exacted from every one of the corps, who ſhould by any means, *directly* or *indirectly*, endeavour to render the ſurgeon intoxicated.* Fines, of a pecuniary nature, are exacted from ſtudents at ſeveral of the univerſities, for non-conformity to the rules of theſe literary inſtitutions. Perhaps they

* IT happens ſometimes that in the army ſchemes are laid, by the more giddy and young part of the officers, to intoxicate one another for *fun*, as they call it. It is not to be expected all the officers of a regiment are endowed with ſtrict abſtinence. Inclinations are as various as faces; and where this coincides with temptation, it will frequently overcome the weaker reſtraints of virtuous principles.

might be found to anſwer in the army, and compel compliance with ſuch a law as we have here hinted at; beſides, they will be able to exerciſe more œconomy, if leſs be ſpent in liquor, a matter of no ſmall importance to ſurgeons and ſubaltern officers.

I WAS told, ſome time ago, of a militia ſurgeon, during the late war, whom the colonel diſmiſſed for this very vice. Nor could he have been caſhiered on a more juſtifiable plea. If it was well founded, the colonel deſerves the higheſt praiſe for depriving him of a ſtation he ſo unworthily filled, and where he had it in his power to do ſo much miſchief. It is remarkable, however, of the young man I am now hinting at, that only a few years before, when he entered the ſervice, he was noted above others of the corps for his ſobriety.* This will

* THIS I cannot abſolutely aſſert as a fact; yet my informer was an officer formerly of the regiment, and now of the regulars, who had a good opportunity of knowing the fact.

will prove what the power of habit and example can effect.

AMONG the catalogue of bad habits, none, perhaps, is more eaſily contracted than drunkenneſs. A medical man cannot plead ignorance of the pernicious effects of ſpirituous liquors on the conſtitution, when uſed to exceſs: he knows well the great complication of evils they will produce on the different organs of the body; and he has this confirmed almoſt daily by the bad health, and many days of prolonged miſery they have brought on many of his acquaintances.—Hear the opinion of a learned, and juſtly celebrated phyſician on the ill effects of wine on the health.—"Wine," ſays he, "when immoderately "uſed, is to young people, what manure "is to vegetation, which haſtens the pro-"greſs of the fruit, but deſtroys the plant. "Wine uſed in early life is a poiſon. It "undermines all the principles of man, "exhauſts his powers, deſtroys the faculty

"of

" of his mind, and excites vomitings, fevers, " phrenzy, madneſs, convulſions, apoplexy, " and ſometimes even death. It is the ge- " neral effect of wine to enervate the ſyſtem " by ſlow degrees, if men habituate them- " ſelves to it in too great a quantity, and " very often to terminate in dropſy, more " commonly, however, it prediſpoſes to " inflammatory diſeaſes, to gout, aſthma, " dropſy, and apoplexy."* He might have added a number of other complaints to his catalogue.—Not only hepatic complaints, loſs of appetite, &c. from a thickening of the coats of the ſtomach, but even loſs of virility. Bacon tells us, he has ſeen the antient opinions of the effects of wine on generation confirmed by experience. It is his opinion, that great drinkers loſe their virility.—I have ſeen the ſtomach of a drunkard diſſected in a public anatomical theatre, where the profeſſor demonſtrated the

* Vid. Zimmerman on Experience in Phyſic. Vol. II. p. 209.

the coats of this organ to be thickened a full inch. Among the heathens, we are told, he was accounted the beſt man, who ſpent more oil in his lamp than wine in the bottle.

I SHALL now lay before my reader the opinion and admonition of a ſenior officer on this very ſubject, who has publiſhed ſome of the moſt uſeful advices to officers in general that have hitherto fallen in my way. I fear his book is too little known, and too little read, among the military. It will apply to all ranks of men, and therefore cannot be improperly introduced in this place.

"How many men," ſays he, "have I "ſeen ſo addicted to this vice, that, in the "morning, they could not lift their trembling hands to their heads, write their "own names, however neceſſary, or hardly "give a rational anſwer, until they had "made themſelves half drunk again! It

"is

" is truly a miſerable reflection, to think
" that men ſhould reduce themſelves to the
" neceſſity of repeating the crime by which
" they have drowned their ſenſes, and de-
" ſtroyed their faculties, in order to be able,
" in a wretched degree, to make uſe of that
" little reaſon and ſtrength they have left
" themſelves.

" I KNOW it may be objected, that
" ſeveral men have been great ſots, and yet
" have preſerved their ſenſes and ſtrength
" to a good old age. To this I anſwer,
" that one ſwallow does not make a ſum-
" mer; and that though there are a few that
" this happens to, yet are there infinitely
" greater numbers who have met with a
" contrary fate. But, allowing it ſhould
" not be hurtful to the conſtitution of ſome,
" is that any reaſon it ſhould be practiſed
" by all? Some men have taken poiſon,
" or picked a pocket with impunity: ſhall
" I therefore cut a purſe, or ſwallow mer-
" cury? This argument is certainly incon-
" cluſive;

" cluſive; but, abſtracted from all this, I " have another reaſon to offer to military " men, eſpecially ſubalterns, who have no " other income to help them but their pay. " Drinking cannot be purſued without " great expences. Now, where is the fund " to enable them to do this? Their pay, " with all the œconomy they are maſters " of, cannot.—They muſt, then, be guilty " of practices I am a ſtranger to, or run " into debt. If the firſt is diſcovered, they " are diſmiſſed the ſervice with ſhame; if " the laſt, they are unable to pay: they " muſt ſell their commiſſions, and ſo part " with the only means they had of living; " and all this rather than break off in time " ſo beaſtly a vice."

He proceeds conſiderably farther inveighing againſt it, and particularly points out the pernicious effects of dram drinking in a morning; a vice he had nearly fallen into from the example, and even *advice*, of

two

two ſenior officers (he having lately before entered the army) who took him with them at their *meridian hour*, under a pretence of its getting him a ſtomach for his dinner; and then mentions his timely eſcape, which he relates at length, as a leſſon to others.

We have ſaid before, it is cuſtomary in the army for the ſurgeon to meſs with the corps. I am rather inclined to think, it would be a better plan if he was not to meſs with them, the better to eſcape this temptation. If he was excluded for this reaſon, or choſe to exclude himſelf, unleſs occaſionally, no officer would treat him with the leſs reſpect. On this head, however, I am cautious of ſpeaking, leſt my brethren of the military medical profeſſion ſhould think me too particular, and over rigid in my regulations. I am certain of one thing, they would live much cheaper, nor yet be leſs happy. When I firſt entered the ſervice, I abſtained, almoſt totally, for ſome time,

time, from the company, I mean the convivial company, of the officers. Some looked on it at firſt as abſtemiouſneſs, and parſimony; others did not heſitate to attribute it to pride. When it came to my knowledge, I related to them the cauſe that deprived me ſo frequently of their company, viz. that having then on the liſt a number of patients, it occupied moſt of my time to conſult books, and preſcribe for them; this was the footing I put it on, which, in a great meaſure, was the fact; though, to avoid temptation, was likewiſe a part, but a part which I thought it then imprudent to confeſs. They revoked now their former opinion; and, I am confident, that from this alone, I gained the eſteem of ſeveral, who might have thought differently of me before. Though I never after this abſtained from the company of officers, when occaſion required, I never to this hour courted it; yet few of my ſtanding, perhaps, ever received greater marks of

civility from a ſet of officers, during the few years I lived among them. I place not this to my deſerts, but to the good diſpoſitions of my fellow officers, and mention it as a farther illuſtration of the doctrine I have now delivered, and would wiſh to ſupport.

CHAP.

CHAP. VI.

Of the Medicines, and their Doſes.

THE medicines alloted for the privates, are not, we fear, always kept either in proper quantity, or well choſen. On this head the officers, for the moſt part, complain grievouſly. There is, at leaſt in ſeveral regiments, if I miſtake not, ſome reaſon for their murmurs. We have pointed out already* what each private pays towards a fund for a medicine cheſt. The ſum is more than ſufficient for the purchaſe of medicines of the beſt quality, as well as variety, for the number of ſick of a regiment. The ſurgeon is always allowed medicine money for the full eſtabliſhment of the regiment: when the actual number is ſmall, which is often the caſe, the ſick are in proportion fewer,

* Vid. Introduction.

fewer, which muſt ſave both medicines and money.

The money has never been found entirely exhauſted, even in the moſt ſickly ſeaſons, when the regiment has been numerous, and the men well ſupplied with medicines; on the contrary, it will appear, that not a third of it is expended for this end, in regiments where moſt complaints called for it, and where the ſurgeon could not be accuſed of acting niggardly. At an average for four years, the money applied to this uſe, in a regiment where I had an opportunity of knowing, did not amount to much above twenty guineas a year, though, for a great part of this time, it was upwards of ſix hundred ſtrong. The ſum allowed for one year by the late eſtabliſhment in this corps, was eighty pounds nine ſhillings, as we have ſhewn by a calculation already made.* Nay, I ſhould be nearer the truth did

* Vid. Introduction.—The late regulation and peace eſtabliſhment has reduced it to 70*l*. a year.

did I ſtate the medicines at an average much lower.* It is natural, then, to enquire, what becomes of the reſt?—the anſwer is obvious—it goes as a perquiſite to the ſurgeon. Is there not a perceptible error here? Does it not ſeem improper to rob the poor ſoldier of the pittance which government allots him, in order that it may become a perquiſite of office to one who has his ſtipulated pay? When the ſoldier is ill, by this management, little or nothing is left for the purchaſe of medicines; and too often as little offered. This reflection I ſhould be ſorry to extend to all the army. I am convinced there are many in the ſervice whoſe humanity and conſcientious care of their patients are as exemplary, as their education and abilities in their profeſſion are reſpectable; but I know aſſuredly, alſo, that there are many palpable abuſes in this part.

* About ſixteen guineas a year.

But the error lies partly in government, by allowing the ſurgeon to have the management of this money; and partly in his ſcanty pay. We have given it as our opinion already, that the nation has dealt very partially with the ſurgeon, not only in what reſpects his pay, but his rank. His ſubſiſtence is mean, and inadequate to his ſervices. Let me not, therefore, throw indiſcriminately any ungenerous reflections on my brethren of the profeſſion. Their minds, I would hope, are far ſuperior to any ſordid views; but ſince they are placed in a ſtation ſo expenſive, and on a ſtipend ſo contracted, ſo greatly inadequate to their neceſſary expences, to ſave for their own uſe what can be conveniently ſpared from the medicine money, is not culpable in them: it is only wrong when theſe bounds are exceeded. Poverty is one of the greateſt temptations to the commiſſion of frauds: and here, too, it is found to do evil. We know, that in regimental practice it often happens, that only

only ſome of the cheapeſt and coarſeſt articles of the materia medica are kept in the medicine cheſt. But another error, for which we cannot offer ſo good an apology, is, that even when it is proper to adminiſter any of theſe, they are ſeldom prepared in a way that can ſecure their efficacy, or enſure their ſucceſs.

It is well known, that as much art and knowledge is often neceſſary in preparing a medicine, and uniting it with proper vehicles to make it ſit eaſy on the ſtomach, as in finding out what claſs of medicines to exhibit. We are obliged, very frequently, to ſtruggle with delicate habits, and irritable ſtomachs, formed ſo by nature, and now doubly ſo by diſeaſe. How often, in ſuch caſes, do we find it expedient to vary our formula, without eſſentially changing our medicine? On other occaſions, it muſt be altered almoſt in every reſpect. If, for inſtance, our patient cannot take it in a liquid, we muſt contrive it in a more ſolid form.—

form.—One cannot take an electuary; another finds it difficult to ſwallow a pill: and thus are we obliged to comply with the various taſtes and antipathies of our patients. When he nauſeates one form, we muſt have recourſe to another; and ſo on, till we find one that will ſit eaſy, and otherwiſe anſwer our purpoſe. For, if a medicine be rejected as ſoon as taken, it can never prove of efficacy: thus will our intentions be fruſtrated. But, in the army, we cannot, for the moſt part, ſo readily adapt the medicine to the palate, becauſe we have few varieties to make a ſelection from.

It may be ſtill urged, notwithſtanding what has already been ſaid, that medicines here ſhould be of the cheapeſt ſort, as beſt agreeing with the fund for purchaſing them; and they may be allowed of a coarſe quality, ſince they are only for ſoldiers, men little accuſtomed to delicate living, or nice medicines; and that if the general tendency of opera-

operation be the ſame, the ſame effects, they will ſay, muſt unqueſtionably follow.

The firſt has already been anſwered, by ſhewing that the money is far from being all expended; therefore, better medicines may, and ought to be purchaſed, where they are wanted, and the ſurgeon's ſalary augmented from a different fund. With reſpect to the other, I apprehend, it is likewiſe ſufficiently anſwered in a former chapter, by what was ſaid relative to a ſoldier's nice feelings.* For though he lives low, and fares badly, yet nature has often formed him with organs as nice, and as mobile as his richer and more delicately faring neighbour. And though it will be found, that there are in the ranks, men of very robuſt conſtitutions, capable of ſwallowing and digeſting any thing of the kind offered them, yet it will not apply to the generality. I have found men among the ſoldiery alto-

 gether

* Vid. Chap. III.

gether as delicate, in regard to taking medicines, and thoſe even apparently robuſt men, as any officer in the corps; nay, with ſtomachs much more irritable. To ſuch perſons, a coarſe ill-prepared medicine is as bad as none, becauſe it cannot be retained: in place of proving ſerviceable, it may create new diſturbances, and, perhaps, occaſion much ſickneſs.

A PRACTITIONER may chuſe his medicines very judiciouſly, yet err greatly in the method of preparation or exhibition. Hence one man's ſucceſs beyond that of another with the ſame medicine, by the difference alone of preparation or doſing. Suppoſe even both were to give the ſame quantity of the ſame medicine, the very time of exhibition will make a difference in many caſes, and prove the ſuperior ſagacity of the one above that of the other. From hence we may draw the following concluſion—that the ſame remedy, in the hands of different perſons, ſhall produce very oppoſite effects; the

the one will be able to relieve, the other only aggravate the complaint thereby. This may be ſaid alſo to belong to the penetration and genius of the preſcriber; but medicines being the medium he uſes to attain his purpoſes, if they be bad, he is defeated.

While, however, I contend for a better choice of medicines in regimental practice, I do not mean that the moſt expenſive are always neceſſary: ſubſtitutes, anſwering the end with equal propriety, may be employed in place of ſeveral of the more expenſive drugs, while, at the ſame time, they are not the leſs palatable or efficacious.

To form a diſpenſatory calculated for the uſe of regimental ſurgeons, might, probably, prove an uſeful work. In general, however, we may follow the plan laid down for paupers out of the army. We have ſeveral forms of pharmacopoeiæ pauperum, where though we find, that the abſolutely rough and ill-prepared medicines are excluded, yet ſe-

veral

veral of a cheap ſort are admitted. It would be prepoſterous for a regimental ſurgeon to keep ſo dear a drug as muſk, or even caſtor, in his cheſt, when ſeveral cheaper of the antiſpaſmodic claſs are to be found, by which his intentions may be altogether as ſpeedily anſwered. At the ſame time, let no ſubſtitute be depended on when the patient's caſe may abſolutely call for a better, or where a protraction of the cure, for the want of ſuch, may be apprehended; for, in ſome caſes, we know not what a day may bring forth: this rule ſhould be laid down as fundamental—never to trifle with health for the ſake of ſaving a ſhilling. To do ſo is unjuſtifiable; and, in the end, will ſeldom fail to injure the ſurgeon's character.

With reſpect to ſome of the ſubſtitutes, he will find ſtrong decoctions of Lintſeed anſwer, in many caſes, among the ſoldiery, as well as Gum Arabic, which is far more expenſive, at leaſt mixed with a ſmall proportion of the ſolution of this gum. Decoc-

tions

tions even of the common Malva, which he may gather almoſt every where, or of Marſh Mallow roots, when he can find them, will make drinks poſſeſſing all the qualities of more expenſive mucilaginous medicines. An electuary formed of the leaves of Cicuta, will have the ſame effects as the powder made from them: this plant he can gather at almoſt all ſeaſons, and every where, and thus ſave himſelf the expence of powder, and the trouble of preparing it.*

THOSE chymical and galenical medicines which he cannot prepare himſelf, but muſt purchaſe from druggiſts, he ſhould be particularly careful in the choice of: theſe ſhould conſtantly be of the beſt quality. Let him remember, that there is no œconomy in buying drugs at the cheapeſt rate, ſince they cannot be genuine: his patient may be the longer

* I HAVE found the uſe of this article of the Mat. Med. very ſerviceable in a variety of caſes, internally exhibited, and externally uſed as a fomentation; and in poultices with coarſe flour or oatmeal.

longer on the ſick liſt, and his trouble encreaſed. For inſtance, can he expect to buy Peruvian Bark at ſeven ſhillings and ſixpence the pound as good as what he muſt purchaſe at a druggiſt's, where genuine bark is kept, perhaps at as much more? A ſmaller quantity will not only anſwer the purpoſe better, but the medicine may be depended on, as far as bark can ſucceed in the caſe. Much of the diſrepute this medicine has fallen into of late is entirely owing to the cheap and ſophiſticated bark practitioners uſe. We might make the ſame remark on ſome of the other medicines, among which is Rhubarb.

His unguents he ſhould prepare always himſelf, and likewiſe in ſmall quantities at a time; for, if long kept, they will prove rancid: beſides, he will find it neceſſary to vary the proportions of ſeveral of theſe to anſwer his intentions. If he buys them, he will generally find them too hard, becauſe, neither the college proportions are exactly kept,

kept, nor the ingredients themſelves always uſed. For inſtance, in the different fats and oils, the cheapeſt will always be uſed, ſometimes much to the detriment of the unguent. Where hog's lard is ordered, mutton fat muſt not be ſubſtituted. He will find lintſeed oil (unleſs for internal uſe) no improper ſubſtitute for olive oil, which is conſiderably more expenſive; but, for internal exhibition, the beſt ſallad oil ſhould conſtantly be employed.

Among the unguents, liniments, and cerates, he will find, perhaps, the following the moſt uſeful: Linim. Semplex. Ceratum Simplex. Ung. Baſil. Flav. Ung. Epiſpaſt. Ung. e Ceruſa, vulgo Album. Ung. Saturnin. Cerat. e Lapid. Calamin. Ung. ex Erugine. Ung. Cœruleum. Ung. Antipſoricum. Perhaps even ſome of theſe may be diſpenſed with.—Among the emplaſtra, the Emplaſ. Commun. Emplaſt. Adheſiv. Emplaſtr. Fœtid.—this laſt he will find more uſeful among the ſoldiers wives

wives than among the men. In ſome ſtomachic ailments it may have its uſe even among the privates themſelves.—Emplaſtr. Veſicator. cannot be diſpenſed with.—He ſhould keep of the powdered Cantharides in his cheſt, and make his Ung. Epiſpaſt. occaſionally as he wants it. He can make it with more accuracy from the flies than by mixing the Ung. Baſil. Flav. and Emplaſ. Veſicat. together.

Among the pills he ſhould keep the following: the Pil. Plumer. Pil. Pacifie. Pil. Stomach.—This laſt may have its uſes among the women of the regiment, more than among their huſbands; for he ſhould not neglect them: nay, though his duty does not oblige him either to give them advice or medicines, his humanity may call on him. We muſt not omit Pil. ex Hydrarg. or the common Mercurial Pill—one which he will find more uſe for than any other yet mentioned. The Pil. Scillit. ſhould alſo be

be kept: dropſies often occur, and this may have its uſe in the diſeaſe.

Among the electuaries he muſt not omit the Elect. Cardiac. vulgo Confect. Card.—this is a very elegant and uſeful compoſition. Elect. Japonic. vulgo Confect. Japonic. In diarrhœas, and the like, it is often adminiſtered with the happieſt ſucceſs.—Elect. Lenitiv.—Elect. Thebaic. is alſo an uſeful compoſition, and an elegant formula of adminiſtering opium, united with aromatics.

Among the powders, Pulv. Diaromaton, vulgo Species Aromatica: this is alſo a very elegant compoſition, and of great uſe.—Pulv. e Jallap. Comp. he may make occaſionally as he wants it. As head purges may be found uſeful in removing ſome ſpecies of head-achs, the Pulv. Sternutat. may alſo be kept; nor muſt he neglect the Pulv. Stiptic. and, above all, let him be provided with the Pulv. Dover. Sive Sudorific.—Thus far of *compound* powders

Among the *ſimple*, we muſt not neglect Rhubarb, and Jallap.—A few Syrups may ſuffice for army practice. Simple ſyrup will be moſt uſed; but, as it will ſpoil in keeping, a proper quantity of coarſe ſugar always at hand, for ſweetening draughts, &c. will anſwer as well as a more expenſive ſyrup of fine ſugar. I would not have him omit the Syr. Scillit.—A Syrup of Lemon Juice may be added, but, perhaps, there is leſs occaſion for it—it may, however, be compounded pro re nata, by diſſolving brown ſugar in water, and adding the lemon juice. I omit Syr. e Diacod. ſince other formulæ of opiates will anſwer as well.

Of the antimonial preparations the following will be ſufficient.—Firſt, as the chief, Tart. Antimon. vulgo T. Emet.—As Vitrum Cerat. Antimon. has been found uſeful in dyſentery,* it may be kept; and as

* Vid. Med. Eſſ. Edinb.

as James's Powders are ſometimes an uſeful medicine, and the compoſition now known, they may likewiſe have a place.—If he chuſes, he may add the Vin. Antimoniale. It is not expenſive.

Among the mercurial preparations with the acids, comes Corroſ. Sublim. or Merc. Sublim. Corroſiv. Alb. The laſt edition of the Edinburgh Pharmacopoeia has given a formula for the ſolution, which is, Corroſ. Sublim. gr. vj. Sal. Ammon. gr. xij. ſolv. in aq. diſtill. libra una.—Mercurius Dulcis, or Calomel, is an uſeful preparation.—Alſo, Merc. Calcinat. and Merc. Precipitat. Alb.—This laſt will be found an uſeful ingredient in ointments for cutaneous eruptions.—Merc. Corroſ. Ruber: a moſt uſeful eſcharotic.*—Of the preparations of ſilver,

* Some think the common pill, made with crude mercury, may ſupply the place of all other more expenſive preparations for internal uſe. I have often found it neceſſary to vary my formulæ, and hence I have mentioned different preparations.

ſilver, the Lunar Cauſtic.—Among his venereal patients he will frequently have occaſion to uſe this.—Of the dry preparations of lead, Sach. Sat.—Of the preparations of iron, Vitrol. Mart. or Green Copperas, as it is commonly called.—Among thoſe of zinc, it will be as well to keep both the Flowers and Vitriol Alb. ſince neither are expenſive. The laſt is ſo uſeful, I hold it among the indiſpenſable medicines.—The Aq. Vitriolic. is alſo uſeful: this he can compound occaſionally. And ſo may alſo the Aq. Stiptic. have a place when he finds it neceſſary, as well as the Aq. Sappharina, if he has opthalmias wherein he may judge its application proper. Opthalmias are very common among the men, and I have often found them very troubleſome: they proceed from various cauſes—not uncommonly from a venereal one.

Among the neutral ſalts, Sal Glauberi and Sal Cathart. Amar. are the moſt uſeful. Sal Polychreſt. and Tart. Solubil. he may uſe

uſe occaſionally, if he chuſes. Neither the Vegetable fixed Alkal. nor the Volatile muſt be omitted. For the Foſſil Alkali he may find but little uſe.—Sp. Volat. Fœtid. Spirit Volat. Aromat. will likewiſe be uſeful; Spir. Vitriol. Dulc.* Sp. Nitri. Dulc. alſo Vinegar, both common and diſtilled. The Spir. C. C. with oil, makes a good liniment in the army for pains, and even ſprains. If made with coarſe oil, it anſwers ſufficiently well.—In place of ſpirituous waters, he will find it cheaper, and not leſs effectual, to uſe the eſſential Oil of Peppermint, or ſome ſuch: a few drops of this will communicate the ſame flavour as if he had made uſe of a large quantity of common diſtilled water from the ſame herb.

He will find ſeveral of the tinctures of high importance. Tinct. Amar. T. Aromat. T. Cinnamom. T. Cort. Peruv. T. Fœtid.

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* Sp. Vitr. Dulc. has lately been uſed with great ſucceſs in fevers.

Fœtid. T. Jallap. T. Japonic. T. Myrrh. T. Rhei. T. Theb. T. Senn. Compoſ. T. Ipecacuan. Elix. Vitriol. Acid. Linim. vulgo Balſ. Anodyn. and, if he pleaſes, he may add Linim. Sapon. as alſo Balſ. Traum. Elix. Guiac. Volatil.—He may add to theſe as many others as he ſhall think proper.—Acet. Scillit. is very uſeful. If he keeps theſe tinctures, the wines may be diſpenſed with.

Of the decoctions, the Decoct. Commun. and the Decoct. Hordei.—perhaps this laſt is ſufficient. I need not tell even the young and leſs experienced army practitioner, that theſe, and many others, are to be prepared as occaſion requires; every one knows that ſeveral of them cannot be kept in a medicinal cheſt. As he muſt practice among the officers, the Decoct. Lignor. can be prepared, if he judges it neceſſary, for any of them. Sarſaparilla is dear, and, unleſs to officers, he may omit it in his pharmacopoeiæ. What medicines are ordered for them they generally

rally pay for. Both the Common and Arabic Emulſion may be ſometimes neceſſary: neither of them is expenſive.—He may keep Mag. Alb. becauſe he will find uſe for it in the caſes of children.

Among the infuſions, that of Tamarinds and Senna may ſuffice. This he muſt alſo prepare pro re nata. The Mucilage of Gum Arabic will likewiſe be neceſſary both in forming pills, and mixing with other medicines, therefore he muſt never be without the Gum. I have found, in ſoldiers coughs, Lac Ammon. and T. Theb. an excellent remedy, therefore, the G. Ammon muſt be one of the articles of the regimental materia medica. Of the conſerves, that of roſes may be enough. Crem. Tart. muſt not be omitted; neither Manna, Sperm. Ceti, nor Sal Nitri. Of the aromatics, we may likewiſe add Nutmeg and Ginger, in powder. Likewiſe, both the root of Liquorice, and the extract, *i. e.* what goes by the name of Spaniſh Juice. It will be proper to have

Balſ.

Balſ. Copaib. Spaniſh Soap, Camphor; nor muſt we omit Fl. Sulph. Pulv. Heleb. Alb. and Crud. Sal Ammon. Theſe I have often uſed with great ſucceſs, in form of unguents, in cutaneous eruptions. I do not give theſe as a liſt of all the medicines he ſhould keep in his cheſt: ſeveral of them he can purchaſe in every quarters where they march to, as genüine as in London. Theſe, variouſly compounded, as his jugement leads, for which no rules can be laid down, will anſwer moſt caſes he may meet with. If he wants more, he will find enough of formulæ in pharmacopoëias. If he finds here ſome which he thinks he may never want, let them be omitted; but, the more of them he poſſeſſes, he will find his cheſt the richer. —Beſides theſe, Leather, old Cloth, Rollers, Tow, and Charpè, are to be added.

Every regimental ſurgeon ſhould poſſeſs two cheſts—one for his tinctures, and nicer preparations; the other for thoſe where leſs care in their keeping is neceſſary. The com-

common cheſts in uſe in the army ſeem very well adapted: perhaps their conveniencies cannot be improved. They appear, however, to be too ſmall. I could wiſh them at leaſt ſix feet long, with a proportional width and depth. I know it is troubleſome to tranſport from place to place, large and cumberſome baggage, ſuch as this will be, but I look on it as neceſſary as their cheſts of arms; and the commanding officer ſhould never find fault with a large medicine cheſt, though he may juſtly, ſometimes, with the officers, for too much *unneceſſary* baggage.

But now reſpecting the doſing of medicines in the regimental practice: this is a matter of the higheſt importance. In the army, however, I have obſerved far more negligence in this, than out of it. Want of convenience may, indeed, be pleaded. This I cannot, however, altogether allow. A careleſſneſs in exactly meaſuring the quantity of the more active ſubſtances will admit

of no apology, ſince a very ſmall variation may prove hurtful. By a ſmall miſtake here, as the poet ſtrongly expreſſes it, we "may do a deed to haunt us to the grave." We may inſtance it in Tart. Emetic. A quarter of a grain of an over doſe may add ſo much to the violence of its action, as to endanger the rupture of blood veſſels. Ruptures of this kind taking place in ſome parts of the body, as in the brain,* may produce immediate death. We can eaſily ſuppoſe, that the ſtraining occaſioned by the efforts to vomit, may detain the blood in the veſſels of this organ in greater quantity; we know that the veſſels there are extremely numerous; that the ſtructure is delicate; that many of them lie looſe, at leaſt are envelloped in ſo tender parts, as eaſily to give way to an impulſe. Apoplexy proves that ruptures take place in the veſſels of the

* Emetici actio violenta, ad capitis morbos gignendos apta nata eſt.—De Haen Rat. Med. pars prim. Contin. p. 185.

the brain.* Pains in the ſpleen may likewiſe follow from violent vomiting, ſince this organ admits, in a ſimilar manner, a greater quantity of blood in proportion to the reſt of the body. The ſplenetic artery is frequently found diſeaſed, and, therefore, the more eaſily ruptured. Whether its tortuoſity adds any thing to this, is difficult to ſay; it is, beyond queſtion, the moſt convoluted veſſel in the body, and is very ſubject to oſſifications. We know that violent running, which hurries the circulation, not only produces pains in the ſpleen, but in the liver. Violent ſtraining may exert a force on theſe productive of the evil we have mentioned; nay, I have heard a reader of anatomical lectures, of ſome experience, aſſert,

* Dr. Monro is of opinion, that not above a tenth part of the whole maſs of blood is circulated within the head, but which is nearly four times more than is circulated in the reſt of the aortic ſyſtem, when the area of the internal carotid, and vertebral arteries, are compared with the area of the trunk of the deſcending aorta.—Vid. Obſerv. on the Nervous Syſtem. p. 3.

aſſert, in his lecture room, he knew a caſe of a rupture of the veſſels of the ſpleen from the violence of emetics.* Violent efforts to vomit have cauſed even a rupture of the œſophagus, and opened a communication between it and the abdomen: it was this that killed the Baron Van Waſſenaer, Admiral of Holland.†

RUPTURES of the veſſels of the ſtomach have likewiſe proved fatal from the ſame cauſe. The death of the famous Voltaire was induced by an hæmatemeſis, and though not by a previous emetic, yet in a way ſomewhat ſimilar.—In the act of declaiming, and in *violent agitation*, inſtructing the actors who were to perform his tragedy of Irene, he was ſeized with a fatal vomiting of blood.

THE late lieutenant-colonel D. died from a ſimilar cauſe. He was a man of gentle man-

* MR. CRUIKSHANK.

† VID. Boerhaav. Opera.

manners, and remarkable in the corps where he ſerved for good nature, ſo that he went by the name of Good-natured D. From various cauſes, and uneaſineſſes that befel him, his health was rendered precarious: he became valetudinary, and his temper changed with the weakened ſtate of his body, to very irritable and iraſcible.—In the beginning of April, 1785, from ſome previous vexation, a vomitting of blood came ſuddenly on—he fainted—the vomiting ſtopped.—Some officious perſons about him at the time, alarmed at this, and ignorant of the conſequences, gave him a conſiderable quantity of Sp. C. C. which, the inſtant it got down, induced again ſuch an effort to vomit, that, perhaps, more than a pound of blood came up at once.—He was now placed in an horizontal poſition, and, apparently, almoſt dead; but, by proper care, he recovered ſo well, in about ten days, as to be able to go abroad. I predicted that a dropſy would moſt likely enſue, from the loſs already ſuſtained, and made this my

reaſon

reaſon for objecting to V. S. which was then propoſed by one of the gentlemen who attended with me, and who had been preſent at the evacuation of the laſt quantity of blood occaſioned by the injudicious exhibition of the Volat. Sp.—They yielded—no more was taken away—but, in a very ſhort time after, the abdomen became evidently enlarged.—This daily encreaſed—and, in the ſpace of about two months, after being tapped, and a quantity of water drawn off, he died.—This caſe comes in as a nearer example; for, the effort of vomiting, wherein the laſt quantity of blood was loſt, might be held as a principal cauſe of the fatal event. From the loſs of the firſt, the patient might have died *dropſical*, or by ſome other *lingering complaint*, but, from ſo ſudden, and ſo great a loſs, added immediately to the firſt, it was impoſſible he could long ſurvive.

In June laſt, I was called to a young lady in the neighbourhood where I reſide, who

who had been long valetudinary, but, for three days before, had been almoſt conſtantly vomiting, from a morbid irritability of the ſtomach, which not only alarmed her friends, but the ſurgeon who attended and myſelf. She had not indeed vomited much blood—what came up was in ſtreaks, but ſufficient to make us apprehenſive, if we could not allay the inordinate action, that a rupture of ſome of the larger veſſels might enſue, and a fatal hæmorrhage take place—but our endeavours to appeaſe it, thank Heaven! were crowned with ſucceſs. In little more than a month after, ſhe was reſtored to perfect health.—Theſe are examples to ſhew the alarming tendency of long-continued and violent efforts to vomit, in whatever manner induced.

But ſhould ſuch fatal accidents not happen as we have deſcribed in ſome of the above caſes, troubleſome hæmorrhages may follow, which, though not attended, with ſo much danger, may diſturb and frighten the

the patient. Should only ſome of the veſſels running through the Sneideirean membrane be opened, it proves unpleaſant, perhaps, ſometimes, even hazardous. I have repeatedly ſeen violent hæmorrhages at the noſe during the operation of an emetic. Such accidents never fail to deter the patient, in future, from the uſe of emetics, be their adminiſtration ever ſo neceſſary.

I HAVE ſometimes ſeen this active preparation of antimony dealt out at random, being carried in a ſmall phial in the pocket, and adminiſtered by gueſs, without the trouble of weighing. A very little pains might have prevented this unſafe method of uſing it, *i. e.* by having always a number of accurate doſes previouſly weighed, wrapped up, and kept in the pocket, till occaſion called for them in viſits to the ſick in quarters. Theſe could as eaſily be carried about to ſave an immediate journey back to the ſurgery, as a phial, and much more ſafety in

in the exhibition. But, even in this way, it will be ſafeſt to direct it to be diſſolved in a certain quantity of water, and taken *partitis vicibus*; for, according to the ſtrength of the T. Emet. then in our poſſeſſion, and the quantity of acid on the ſtomach, will its action be either greater or leſs. The ſame method may be uſed with Jallap, *i.e.* having the doſes weighed; and the ſame ſtill with ſome other active medicines, which I have ſeen, too often, in the army, adminiſtered in this vague and random way.

If, in this *gueſs method*, through fear of giving too much, we give too little, the effects we intended cannot take place; and either time is loſt, or worſe miſchief done: the patient, inſtead of being better, may be rendered much worſe. T. Emet. will afford a good example here alſo. Let us ſuppoſe we intend full vomiting; that from the ſymptoms of the caſe it is thought neceſſary. We adminiſter the emetic in the random way—the quantity is too ſmall.

We call the next day to know how it operated—and, lo! inſtead of pukeing, it purged.—The patient is now much worſe—his pulſe is low and feeble—his ſtrength is much exhauſted!—Obſerve what is done!—Perhaps it may not be in our power to raiſe the pulſe, or recover that ſtrength which we loſt by this miſconduct. But the overdoſing is a thing that is more likely to happen, and will be what we have moſt to fear.

ALL theſe inconveniencies may be avoided by the method already pointed out, *i. e.* by weighing, and, thoſe of more violent operation, with the greateſt nicety. If our ſcales, however, be bad, we had juſt as well be without them. The beſt are apt to contract ruſt, if not carefully prevented by keeping them dry and clean. The air itſelf contains enough of acid to corrode them, with moiſture enough likewiſe to give it action. The ſmalleſt deviation from an even balance, will prevent them from ſerving nice purpoſes.

poſes. The bad ſituations in which a regimental ſurgeon is often placed, with reſpect to his hoſpital and ſurgery room, will render this more liable to happen; but this is the chief reaſon he ſhould be more careful to clean them and keep them from dampneſs or dirt. Some may look on this as a trivial matter; but, whoever conſiders what has already been ſaid on the activity of medicines, and the great variety in the effects a ſmall increaſe or decreaſe of the quantity makes, will be of a different opinion.

What has been ſaid of T. Emet. is to be underſtood of Opium. The ſtrained opium is what I have in view. It ſhould no more be adminiſtered at random, than the other. The bulk of a grain, or a grain and half, the moſt common doſe, is very ſmall, and may eaſily be too much augmented without the eye perceiving it. The L. Laud. we ſhall allow him to carry in a ſmall phial, the doſe of it being aſcertained

by

by drops. Pulv. Doveri is another I have ſeen exhibited, as alſo Pulv. Jallap. in this unwarrantable random way to ſoldiers.

More might ſtill be mentioned; but we hope theſe will ſuffice, and point out, to ſuch as are about to enter the army, the impropriety of imitating ſuch careleſs practice: nor ever to liſten to the common, but deceitful tale, that a ſoldier's conſtitution far exceeding others in ſtrength, any thing in the way of medicine *may do for him*. Language of this ſort can only proceed from ignorance; and to believe it, and practice accordingly, end in diſgrace.

CHAP.

CHAP. VII.

Of Diſſections.

WHEN we conſider that many of the gentlemen in the regimental department of medicine entered the ſervice before they were properly initiated in the principles of their profeſſion, it will not appear ſtrange, if diſſections be but little proſecuted in many regiments, eſpecially among young practitioners of this deſcription. To inſpect dead bodies, ſo as to reap advantage from it, is not only attended with labour, but requires an adequate proportion of ſkill. The want of ſufficient anatomical knowledge may deter many, and, in ſome degree, account for the neglect of this branch.

No place, however, is better adapted for proſecuting diſſections than the army, from the frequent deaths that muſt take place among

among ſuch a number of men, I mean where more regiments than one (as is often the caſe in time of war) lie together. But though they cannot happen ſo often in ſingle regiments,* yet many opportunities occur there alſo. Above all, the total diſpoſal of the bodies at the commanding officer's pleaſure, renders it extremely eaſy; for the ſurgeon, when a patient dies, need only aſk, and he will obtain leave to inſpect it.

"THE more we know of our fabric," ſays the learned Dr. Hunter,† "the more "reaſon we have to believe, that if our "ſenſes were more acute, and our judge-"ment more enlarged, we ſhould be able "to trace many ſprings of life, which are "now hidden from us; by the ſame ſaga-"city

* I HAVE ſeen a year paſs with but one death out of upwards of 600 men; but I have ſeen ſeven happen in the ſame ſpace, in ſickly ſeaſons, and from other uniting cauſes.

† VID. Introduct. Lect. p. 65.

" city, we ſhould diſcover the true cauſes,
" and nature of diſeaſes; and thereby be
" enabled to reſtore the health of many,
" who are now, from our more confined
" knowledge, ſaid to labour under incurable
" diſorders. By ſuch an intimate acquaint-
" ance with the œconomy of our bodies, we
" ſhould diſcover even the ſeeds of diſeaſes;
" and deſtroy them before they had taken
" root in the conſtitution.

" THIS, indeed, is a pitch of knowledge
" which we muſt not expect to attain; but,
" ſurely, we may go ſome way; and, there-
" fore, let us endeavour to go as far as we
" can. And if we conſider that health and
" diſeaſe are the oppoſites of each other,
" there can be no doubt, that the ſtudy of
" the natural ſtate of the body, which con-
" ſtitutes the one, muſt be the direct road
" to the knowledge of the other.

" WHAT has been ſaid of the uſefulneſs
" of anatomy in phyſic, will only be called

" in

" in queſtion by the more illiterate empyrics
" among phyſicians. They only diſcourage
" others from the purſuit of knowledge
" which they have not themſelves, and
" which, therefore, they cannot know the
" value of; and tell us, that a little of ana-
" tomy is enough for a phyſician."

THAT diſſections will prove of great utility, I am perſuaded, need only be mentioned to gain it credit with moſt people of the medical profeſſion; and even now with a great part of the world in general. When the ſurgeon, therefore, has a patient of whoſe diſeaſe he is doubtful where to rank in noſology, or how to treat in practice, from its uncommon and anamolous nature, according to his experience, every ſymptom ought to be attended to, and as carefully noted down: his obſervations ſhould be made once, twice, or oftener in the day, if convenience will ſerve; and the effects of the medicines he preſcribes accurately remarked. If, notwithſtanding all the care

he

he uſes, the patient dies, and doubts ſtill dwell on his mind reſpecting the nature and cauſe of the complaint, he ought, as a public regimental concern, if he underſtands anatomy, to requeſt leave to inſpect the body: if he omits it he is certainly culpable.

We ſhall ſuppoſe him engaged in it: and here he ſhould as carefully take notice of every appearance deviating from the healthy ſtate. Theſe are to be compared with the ſymptoms already remarked, and from this he will be able to judge how far the ſymptoms are explained, or what remains ſtill to be accounted for. The uſe of this is obvious; ſhould ſome future period place a patient in his ſick liſt with ſimilar ſymptoms, he will now be better able to form a juſt notion of the diſeaſe. If he has every reaſon to ſuppoſe it is beyond the power of medicine, this even will prove a ſatisfaction not only to himſelf, but to the commanding officer, whoſe duty it is to enquire after the men's health, and the medical attendance

given them. It will likewiſe relieve the ſurgeon from any future reflections.—For example: a patient comes into his hoſpital, whoſe chief ſymptoms are as follows:—an irregular intermitting pulſe; great palpitation of the heart on the ſlighteſt motion; diſpnœa; the apex of the heart changed from its natural ſituation, and turned conſiderably more towards the ſternum.—Another patient comes, where the beat of the heart itſelf is felt lower down towards the falſe ribs; he is alſo affected with palpitation, and great difficulty of breathing.—Both die.—On diſſection, he finds in the former caſe, the pericardium greatly enlarged, and containing a conſiderable quantity of ſerum; and which, by its long and conſtant preſſure on the left lobe of the lungs, prevented the blood from flowing into it, and the lobe itſelf from receiving its due nouriſhment, whereby it is almoſt totally conſumed, and the heart preſſed into its place:—in the latter, a preternatural dilitation of the heart itſelf; and, joined to this, an oſſification of its

its valves.* On this diſcovery, he ſhall be perfectly ſatisfied, his care and medical knowledge were altogether unequal to the taſk of reſtoring the healthful functions of theſe organs, and ſaving his patient's life. Hence no future reflections can be thrown out, with the leaſt ſhadow of juſtice, againſt him in the medical treatment of theſe caſes; for, occular demonſtration proved them to be incurable.

ANOTHER example:—he is again called to a patient.—After proper enquiry, and mature deliberation, he is furniſhed with the following hiſtory, and is able to recount the ſymptoms here mentioned.—Firſt, the patient has been long valetudinary—dates the cauſe to a ſevere fever, almoſt ſo far back as twenty years—which changed the conſtitution from robuſt to weak—the countenance from a florid to a pale and cahectic appear-

* THESE are two real caſes; but neither of them happened in the army.

appearance.—Became thin—delicate—and ſubject to hyſteria (the patient was a female) and this weakneſs and delicacy perhaps heightened by her becoming the mother of ſeveral children.—Complaints continued ſlowly advancing, till the latter end of 1782. —Medical advice was then had recourſe to. —The ſymptoms that *then* preſented were theſe :—an anxiety, and an uneaſy ſenſation on inſpiration.—Senſe of a ſtricture about the breaſt; it gave the idea of a contraction of the parts.—Was attended with much pain ; nay, ſo violent, on taking the exerciſe even of gentle walking, as to oblige her to ſtop ſhort, to recover her departing breath, and keep herſelf from fainting.—On theſe occaſions, pulſe low, yet never intermitted.—Great depreſſion of ſpirits.—Every night now, on going to bed, theſe painful ſpaſms recurred with violence—would continue from one to two hours, or longer—then yielded for ſome time—but a night ſeldom paſſed without one or two of theſe painful paroxyſms. —They were at the ſame time accompanied with

with a ſenſe of wearineſs, and pains in the limbs.—Obſerve, however,—theſe painful paroxyſms of difficult reſpiration gave her ſometimes a reſpite for a month at a time.—In theſe intervals hyſteric affections often appeared.—It muſt not be omitted, that, during the fits, there was great palpitation of the heart.—The intervals of eaſe which we have ſaid were ſometimes a month, became gradually ſhorter; and, as might be expected, ſhe grew ſtill more debilitated.—Was now extremely eaſily thrown into perſpiration.—The admiſſion of the gentleſt ſtream of cold air gave great uneaſineſs—ſo much, that on going into the open air, ſhe was obliged to guard againſt it with the ſtricteſt care, by warm flannel put round the breaſt, and up to the neck.—Appetite now failed.—Complaints ſtill encreaſed—recurred with aggravated—with reiterated ſeverity—till at length, in the beginning of 1786, ſhe was releaſed by death from her miſery.—On inſpecting the contents of the thorax, from whence the chief of theſe painful

ſymp-

ſymptoms ſeemed to originate, not only in the pericardium, but in both cavities of the breaſt, a conſiderable effuſion of ſerum was found.—Here was an explanation of part of the ſymptoms.—The inſpection was further proſecuted.—The heart itſelf was carefully examined—and, lo! the valves placed at the entrance of the right ventricle were found ſtrongly oſſified, and ſo united, that the paſſage for the blood to flow into the veſſel was nearly ſhut up; the aperture left was little more than could admit a ſilver probe of the common ſize!—Here was enough to account for death; and to prove, likewiſe, the diſeaſe incurable!—Obſerve—in this caſe, no intermiſſion of pulſe was diſcernable, till towards the laſt period of the complaint; and it was no great while before death, when the ſymptom of painful ſpaſm was attended with conſiderable intervals.—Let the phyſiologiſt, however, ex-explain it.—The caſe is a proof of the utility of diſſections, in as far as it clearly proved, that the event was irremediable—it ſatisfied rela-

tions and friends—it prevented reflections on the attending practitioners !*

Such caſes of diſſections ſhould be carefully tranſcribed into a book kept for that purpoſe; and, joined to them, any remarks occurring on the occaſion. Theſe, no doubt, would be found extremely uſeful afterwards. Nor am I ſure, whether they might not prove as ſerviceable to the regiment in time to come, to have a copy of them taken by the regimental clerk, for the inſtruction of ſucceeding ſurgeons, as any other regiſter in their poſſeſſion. Could they ſave one life only in the ſpace of twenty years, they would compenſate ſufficiently for the labour of regiſtering; while the inſtruction reſulting from the caſe to the ſurgeon himſelf would be a farther compenſation, and a ſufficient motive for his purſuing diſſections in future.

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* This is alſo a true caſe, in the author's practice, but not in the army.

ANOTHER leſſon, equally inſtructive, will reſult from diſſections, *i. e.* when ſome caſe preſents, the nature of which he is acquainted with, but cannot ſucceed in removing the diſeaſe. Suppoſe an ileus: this, he knows, conſiſts in a ſtricture of the inteſtines, which prevents a depoſition of the fæces. He tries every method to remove it, which reaſon or experience ſuggeſts: oily and turpentine clyſters; tobacco ſmoke; veneſection; bliſters laid on the abdomen; the daſhing of cold water over the lower extremities,* with every other means in his power: all are in vain. He reads, as he turns over authors on the ſubject, in order to collect their different practices in ſimilar caſes, of a propoſal to force the ſtricture by weight. He has recourſe to it: ſeveral ounces of crude mercury are immediately ſwallowed by the patient, and repeated at a ſhort interval. It will not ſucceed: the ſtricture remains

* VID. caſe in the Med. Eſſ. cured by this.

remains fixed. A mortification quickly enſues, and death is the conſequence. The body is opened to diſcover the ſtricture; and, lo! the boaſted mercury, inſtead of deſcending in an uniform maſs to the ſeat of the diſeaſe, is found divided into millions of globules, of great minuteneſs, by the mucus of the ſtomach and inteſtines over which it paſſed, there remaining, and adhering to their coats. This proves inſtructive to him; for though he could not remove the diſeaſe, yet, when a ſimilar caſe preſents, he can ſay, with great confidence, that this boaſted and theoretical remedy is as uſeleſs as it is imaginary, while the diſſection ſtands on record to corroborate his aſſertion.*

* Vid. De Haen Rat. Med. where this is propoſed and recommended.—This is likewiſe a real caſe.—When I was a ſtudent at Edinburgh, this practice was put to the teſt in the Clinical ward of the Royal Infirmary by Profeſſor Home. The patient died; and the diſſection, at which I aſſiſted, proved what is now related.

But diſſections are uſeful in other reſpects. In the manual operations of ſurgery it is from them we learn, what we may do with ſafety, and how we may avoid difficulties, and eſcape dangers.—"It is diſſections alone that can teach us where we "may cut the living body with freedom "and diſpatch; and where we may venture "with great circumſpection, and delicacy; "and where we muſt not, on any account, "attempt it. This informs the *head*, gives "dexterity to the *hand*, and familiarizes "the *heart* with a ſort of neceſſary inhumanity, the uſe of cutting inſtruments "upon our fellow-creatures."*

There

lated. The body was opened by my learned fellow-ſtudent, the late Dr. Cleghorn, jun. (profeſſor of anatomy afterwards in the univerſity of Dublin) then clinical clerk; whoſe abilities will long remain in the memory of his acquaintances, and his death be long regretted by all that knew him, as well as all lovers of medical ſcience.

* Hunter's Introduct. Lect. p. 68.

THERE may be many caſes given as examples of the utility of diſſections: among others, ſudden and unexpected death; or where the patient complained, but his complaints ſo vague, that the phyſician could diſcover little or no ſymptoms by which he could guide his practice. I ſaw a caſe of this kind, in 1781, under the care of one of the ableſt phyſicians of the age: the patient was a boy about twelve years old. Leave was not obtained to inſpect the body; but, there is reaſon to believe, diſſection would have thrown ſome light on the ſubject. Perhaps ſome diſeaſe might have been diſcovered in the brain. The boy complained of ſome head-ach; yet had no feveriſh ſymptoms; nor did any thing appear to indicate hydrocephalus internus (and yet I have ſome reaſon to think water was lodged in the head) except that he ſaid his ſight and hearing were both ſomewhat occaſionally (not conſtantly) impaired.

BUT

But I find, from a caſe I had under my care at Ipſwich in Suffolk, in March 1784, that the ventricles of the brain may be loaded with water, yet few of theſe ſymptoms appear which authors have laid down as almoſt invariable in ſuch caſes; nor yet the diſeaſe run through thoſe regular ſtages they have related as its common courſe. The patient I mean here was a young man, twenty-three years of age. When he came to aſk my advice, his chief complaint was a violent head-ach, returning irregularly; would ſometimes continue for hours; at other times, ceaſe in a few minutes; he had a tingling noiſe in his ears; and I found he had convulſive fits ſometimes: theſe, likewiſe, his maſter ſaid, attacked him irregularly—ſometimes two or three times a day; ſometimes not for ſo many weeks. He had been affected in this manner ſeveral years. He was of a very florid complexion; his ſkin thin and ſmooth; his hair fair; and he of a ſoft lax temparament, evidently

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ſanguineous. I was alſo informed, his father had died of a complaint ſomewhat ſimilar, as it was deſcribed to me. I muſt not omit, that on taking nouriſhment of any kind, he informed me, his head-ach encreaſed, and if the food was hot, ſtill more; became violent; and he was now apteſt to be ſeized with a fit. I obſerved, alſo, that he leaned his head to one ſide, and ſeemed to have a rigidity of the neck. His maſter confirmed this to me afterwards, and added, that he would hold it a few minutes on one ſide, then turn it on the other, as if to reſt it. From the account I had received of the father's death, I looked on the complaint as hereditary, and owing to a mal-conformation of the parts, perhaps the bones; but, as his countenance appeared ſo florid, and his whole habit full of blood, I directed the ſurgeon to open the temporal artery, and take away ten ounces of blood; then to ſhave the head, and apply a bliſter. As he was of a coſtive habit, and, he ſaid, always worſe when he went two or

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or three days without a ſtool, which was often the caſe, I ordered him ſome laxative pills. It is to be obſerved, he had no fever, nor ever had been affected with one ſince the head-ach began. The ſurgeon endeavoured to open the artery as directed, but could not ſucceed; he then opened a vein in the arm, with conſiderable difficulty, on account of the ſmallneſs of the veſſels, and depth they were ſunk; he took, however, the quantity mentioned, and got his head ſhaved; but, an uncle, to whoſe houſe he now repaired (for he was obliged to leave his ſervice) would not permit the bliſter to be applied: a week, or more, intervened, and then it was laid on his back. It is remarkable of the blood, that it concreted ſpeedily into a firm, ſolid maſs, with the ſeparation of little or no ſerum, and with a thick, tough pellicle of coagulate lymph on the ſurface. This ſeemed to indicate more evacuations. His pills were given, and they had the effect. He continued better for ſome time; but, as the uncle refuſed to com-

comply with my advice, in not applying the blister, I did not afterwards prescribe for him. Mr. Stebbin, of Ipswich, the surgeon that attended, visited him, however, once or twice after. He grew better; had no fits, and but little head-ach for a fortnight; on which, concluding himself well, he returned to Ipswich to resume his servitude. He called on me the same day, and thanked me for my care. There was no reason, from the trifle that had been done, to suppose him cured. On looking in his face, I perceived his eyes stare, and the pupils dilated rather more than in health; yet he did not complain of any defect in his vision. He had the same stiff appearance in his neck. He left me, and, in an hour or two after took a fit, which made him again return to the country that evening. In three days after, he was dead. The morning he died, he rose out of bed without help, which he had not done for a day or two, sat down in an armed chair, talked a little, as usual, with one of the family, and said

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he was better; then ſhut his eyes, as if falling into ſleep, leaning his head againſt the back of the chair. He continued ſo for half an hour, and they concluded he was aſleep, and would not diſturb him; but, on going near, they found him dead.—Leave was given to open the head. I begged the ſurgeon to inſpect it, but, being at that time confined to bed with a complaint in my leg, I could not attend him. On returning, he gave me the following relation:—that in place of veſſels being burſt, and an extravaſation of blood on the brain, as we both ſuſpected, he found the ſtate of things very different. The cranium extremely thin, more ſo than he had ſeen it in any ſubject; and ſoft in all its parts; ſo that the ſaw ran through it with the greateſt eaſe; and it ſeparated from the brain without any difficulty whatever. While he was cutting the occipital bone, pretty low down towards the neck, the ſaw going through, and penetrating the dura mater, above the cerebellum, but nothing more, a ſtream of water iſſued out. Beſides

what

what was thus loſt, he ſaved about ſix ounces. The young man's maſter, who went with the ſurgeon, and another man, being preſent, both declared there was in the whole full ten ounces. The whole ſubſtance of the brain was ſoft and flabby, rather whiter than uſual, and no marks whatever, or red points, to be ſeen in the inſide of the ſkull, which commonly happens in diſſections, from the rupture of the veſſels communicating from the external with the internal parts of the head. He examined the reſt of the brain, but found no ſchirroſity either in the pituitory gland or other parts. From the ſight being ſcarcely at all injured, it would ſeem that the water had been more in the third and fourth, than in the lateral ventricles; for, had theſe been full, the thalamus nervorum opticorum muſt have been compreſſed, and viſion impeded. Thoſe who contend, that no communication is to be found between the third and fourth ventricle, will ſay, the water was all contained in the fourth;

and would uſe this as a caſe in point to prove it. But it would be too raſh to conclude this here, from the ſpongy ſtate of the brain, which did not allow of an accurate examination of the other ventricles; and from the ſpecific gravity of the fluid falling down to this, as the moſt depending part, and puſhing its way there with more eaſe from the diſeaſed ſtate of the cerebellum.

It has been objected to me, in ſpeaking in favour of regimental diſſections, that it would deter men from entering into the ſervice; for as it would be rumoured abroad, that men were always opened when they died in the army, as the vulgar in general expreſs an abhorrence of the practice, it muſt follow, that none would chuſe to enliſt into a regiment where this was cuſtomary. This, however, is an ill-grounded objection; nor do I think it can carry any weight with it. Is it not meritorious to endeavour to ſearch out the cauſes of diſeaſes? and muſt not this hold as well in the

the army as out of it? No regiment, I am confident, will bear a worſe report on this account. Many examples might be quoted, where they have been proſecuted by the ſurgeon on every proper opportunity, and, no danger of this kind followed. But, I can pronounce the objection groundleſs from my own experience. I have been preſent at a diſſection made in a regiment which, ſo far from being done in a clandeſtine manner, through any apprehenſion of this nature, it was done openly, and in the preſence of ſeveral ſoldiers, who were called as attendants and aſſiſtants; and with the knowledge of the whole hoſpital beſides; and, before it was finiſhed, might be known to upwards of fourteen hundred ſoldiers then in the town. Nay, I have been informed, that, in ſome regiments, to the honour of the commanding officer and corps, when a private dies, the ſurgeon receives orders to inſpect the body. Incapacity or idleneſs may invent apologies for neglecting anatomical reſearches; but, we would beg leave

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to ſuggeſt ſome heſitation in fixing ſuch a ſtigma, as I would call it, on the army in general. The works of ſeveral eminent men who have practiſed in the army, and improved their profeſſion there, remain laſting proofs of the futility of ſuch objections.

Besides, this is not an age for ſuch ignorance and ſuperſtition. We find few now, of any rank, that are not fully convinced of the utility of opening bodies for the benefit of ſurvivors; particularly when the diſeaſe has been ſuch as could not be aſcertained; or when it is to prove by demonſtration, for the ſatisfaction of friends, diſeaſes that lay beyond the power of aid. Were we to multiply authorities to ſupport us in our opinion of the great importance of diſſections, many might be quoted. "The "opening of morbid bodies after death," ſays Sir George Baker, "if it does not al-"ways aſſiſt a phyſician," (the regimental ſurgeon ſhould have the knowledge of one) "in his future practice, has its ſingular uſe,

"in

" in as much as it frequently exhibits the " genuine effects of a fatal diſeaſe."*

I HAVE attended patients (not ſoldiers) particularly young ſubjects, under hydrocephalus internus; and, when they died, the parents have *inſiſted* on my opening them; and, in one caſe, the father ſtood by me all the time. I will venture to ſay, that whenever I wiſh to open a body, either in the army or out of it, I ſhall be able to accompliſh my deſigns; at leaſt, this far I may affirm, that I never yet met inſuperable difficulties here; neither have we any reaſon to ſuppoſe, that others will be leſs ſucceſsful, if they make the attempt.

" THE hiſtory of anatomy," ſays Dr. Hunter, " ſhould ſtimulate *us all* to culti- " vate it with diligence, when we ſee, that " anatomiſts, in all ages, have made uſeful " diſcoveries; and, in conſequence thereof, " have

* VID. Med. Tranſ. Vol. II. p. 468.

" have enjoyed the advantages of reputation
" in their profeſſion; and when we ſee,
" that the ſubject is ſtill ſo far from being
" exhauſted, that it is to this day, and muſt
" be to the end of time, new, entertaining,
" uſeful, and inexhauſtible."*

When friends and relations obſerve, that the requeſt is not made from wanton and idle curioſity, but for the ſake of information; when, beſides, they obſerve all delicacy uſed, as far as the nature of ſuch operations can admit, the reluctance they at firſt might ſhew to the propoſal, now ceaſes. Uſe will even reconcile people more to it; and, from its frequency, it will become familiar.

" Were I to gueſs," ſays the author above quoted, " at the moſt probable future
" improvements in phyſic, I ſhould ſay,
" that they would ariſe from a more general
" and

* Vid. Introd. Lect. p. 62.

" and more accurate examination of diſ-
" eaſes after death. And were I to place
" a man of proper talents, in the moſt
" direct road for becoming *truly great* in
" his profeſſion, I would chuſe a good
" practical anatomiſt, and put him into a
" large hoſpital to attend the *ſick*, and *diſſect*
" the *dead*."

It will be farther objected, and we may, perhaps, be aſked, how can young men proſecute them with ſucceſs, who, according to our own ſuppoſition, never had proper opportunities of inſtruction? True; they cannot at firſt; but, if inſtruction be their wiſh, by the help of books on the ſubject, and the inſpection of bodies, they may, in a great meaſure, overcome theſe obſtacles. Diligence and perſeverence have often ſupplied the want of better opportunities of information. I knew a gentleman (now dead) who, by ſuch application in opening bodies, firſt inſpecting dogs, ſheep, &c. arrived to a tolerable proficiency in anatomical know-

knowledge, before he ever entered the walls of an univerſity, or ever ſaw a diſſection but what he had made himſelf; and, at this time, I am confident, he knew more of the human body, could deſcribe more of its parts, and their ſituation, than many who had ſpent ſeveral years there profeſſedly at the ſtudy.

"If we look among the phyſicians of "the beſt character," ſays the learned author we have ſo often quoted on this part of our ſubject, "and obſerve thoſe who "have the *art* itſelf, rather than the *craft* "of the profeſſion at heart, we ſhall find "them conſtantly taking pains to procure "leave to examine the bodies of their pa- "tients after death. Deſirous that it may "be done by experienced anatomiſts (a cir- "cumſtance often of the higheſt import- "ance) and unhappy when they cannot "procure this opportunity of improving "themſelves and their art."*

On

* Hunter's Introd. Lect.

On the whole, no doubt can remain but the regimental ſurgeon, who wiſhes to improve himſelf in this branch, will find opportunities enough in the army: and ſhould it not be cuſtomary in the regiment before, he will not, I think, find it impracticable, by proper repreſentation, to prevail on his commanding officer to allow it; and what he wiſhes to have done, it is well known, muſt not in the regiment be refuſed. Some murmurs may at firſt be heard, but it will depend on the ſurgeon's own conduct and behaviour to quell them. They will ceaſe by degrees, as the novelty of the cuſtom abates, and the ſooner, if he be careful to point out the uſe and real intention of his reſearches.

I cannot do better than finiſh this ſubject with the ſentiments of the celebrated anatomiſt* above alluded to, in anſwer to an-

* Dr. Hunter. Vid. Introd. Lect. p. 68.

other opinion that has been given againſt the proſecution of diſſections: the opinion, that it is not worth the trouble; and even unneceſſary, to drudge any length in it.—"When we hear," ſays he, "of any men "of the profeſſion talking of all the know-"ledge of anatomy that is neceſſary for a "phyſician, and of as much as a ſurgeon "needs to know, we cannot but lament "the ſingular hard fortune of his patients; "firſt, in being ſick or diſeaſed, and then "in falling under the care of ſo ignorant a "counſellor.—Who is the man of practice "and interity that can lay his hand upon his "heart, and ſay, that he has not, in ſome caſe "or other, had occaſion for all his anatomi-"cal knowledge; and who has not wiſhed, "at times, that he had been poſſeſſed of "more?—Who, then, are the men in the "profeſſion that would perſuade ſtudents, "that a little of anatomy is enough for a "phyſician, and a little more too much for "a ſurgeon? God help them! they have it "not themſelves, and are affraid that others "ſhould

" ſhould get it. The more clear and perfect
" our knowledge of every part of the body
" is, both in its ſound and morbid ſtate, the
" better we ſhall underſtand the nature, and
" ſtrength, and tendency of its diſeaſes.
" Thence we ſhall more readily and cer-
" tainly learn to diſcover a diſeaſe in its be-
" ginning; to obſtruct its progreſs; to put
" it under difficulties; to prevent its gain-
" ing ſtrength by the acquiſition of auxili-
" aries; to cut off its ſupplies; and, finally,
" to drive it out."

CHAP.

CHAP. VIII.

The neceſſity of good Inſtruments—of fixable Air—and of Electricity in Regimental practice.

INSTRUMENTS proper for operations ſhould always be in readineſs. No regimental ſurgeon ought to be without them; for although operations ſeldom occur in a regiment, except on actual ſervice, and after a battle, yet caſualties may, and do ſometimes happen. On ſuch occaſions, therefore, to be unprovided is unpardonable.

COMPLEAT pocket caſes, and ſets of amputating inſtruments of the moſt approved form, with needles, thread, and ſponge, ſhould be procured. As a ſurgeon in the operative part of his profeſſion improves greatly by practice, ſince dexterity of hand is as neceſſary as judgement, he ought fre-

frequently to operate. This will be a farther reaſon for his proſecuting diſſections on every convenient opportunity.

We have already taken notice, that ſuch opportunities will often preſent in his line of life, where, undiſturbed, he may improve himſelf in operations, and in a knowledge of the ſtructure of the human body. He that labours moſt in this branch, only knows how much ſtill remains to be attained. What then ſhall we ſay of the ſurgeon, who never labours at all? Perhaps the moſt experienced in operative ſurgery never performs an operation, that, when it is over, he does not diſcover ſomething omitted; and who has not reaſon to ſay to himſelf, "If this was to do again, I would perform "it differently, by which, as I now per-"ceive, I ſhould avoid not only inconveni-"ences to the patient, but to myſelf." I have heard experienced ſurgeons make ſimilar declarations.

Cool, ſteady, deliberate intrepidity, where neither the heart ſhall fail, nor the hand ſhake, is of all other things the moſt requiſite in this art. But this can only be acquired by frequent repetitions of operating. It is this that gives confidence from our knowledge, ſteadineſs from uſe, and prevents raſhneſs, which is the effect of ignorance. Although the operation on the dead and living ſubject be different, yet it is on the dead we can beſt initiate ourſelves in the practice. Here we firſt acquire a dexterity and readineſs of hand; our knife becomes eaſy and familiar to us, and aukwardneſs is overcome by frequent repetition. When we come to execute the ſame on the living ſubject, it is true there are caſualties and difficulties we muſt expect, and be prepared for; ſuch as large hemorrhages, and other things, which in the dead ſubject do not diſturb us. If we are altogether novices in our buſineſs, theſe may conſiderably diſconcert us; and perhaps create ſuch an alarm as to prevent our finiſh-

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ing the operation, from the trepidation we are thrown into. Nor is this a new caſe: ſurgeons have been known to begin operations, and for want of ſufficient courage, which a more frequency of operating would have given, have yielded the knife to another; yet who were not perhaps leſs informed in what was requiſite to be done, than the perſon who finiſhed them. Even after we are well accuſtomed to the uſe of the knife, accidents may happen which ſhall confuſe us. If, for example, from too great an eagerneſs to extract the ſtone in lithotomy, the young operator ſhould chance to gripe it ſo hard as to break it in pieces, it might not only throw him into confuſion, but really occaſion miſchief to the patient, by the admiſſion of air into the wound during the time ſpent in ſcooping out the different fragments, and from the encreaſed irritation given by the frequent introduction of an inſtrument for this purpoſe. Or if in an amputation the veſſels ſhould be found difficult to be ſecured from

a diſeaſe in their coats, it might in like manner diſturb him, and perhaps confuſe him ſo much, as to prevent the proper degree of reflection now neceſſary. The coats of arteries are alſo ſometimes ſo indurated, and even brittle through diſeaſe, that when the limb is taken off, much difficulty attends making the ligatures on them properly ſecure. I have been preſent at caſes where one of the moſt experienced ſurgeons in London found no ſmall obſtacles in this part of the operation. After taking off the limb, the arteries were ſo brittle, that no ſooner was the ligature drawn tight, but the veſſel broke through before its ſides could be brought ſo cloſe together as to prevent the hemorrhage; and this took place repeatedly, even to the third or fourth time. We may eaſily conceive into what a terror a young man, little accuſtomed to operations, would have been thrown in theſe caſes. Arteries may be putrid, and the ligature from thence give way, and cauſe much confuſion. We have a caſe of this ſort in vol.

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ſecond of the Med. Comment. wherein this happened after an operation on the femoral artery, performed by Mr. Leſlie of Cork. About an hour after the artery was taken up, the ligature cut through, and produced ſome inconveniency.

A SURGEON knows the value of good inſtruments, and will therefore take care to be provided with the beſt, if he wiſhes for ſucceſs in operating. Both himſelf and the patient will reap the advantage of them. This is not the caſe, however, with all regimental practitioners. It has been found neceſſary to ſpur ſeveral on to their duty in this reſpect. In caſes where negligence is obſerved in keeping good inſtruments, it becomes the commanding officer's buſineſs to oblige them to be well provided. And I am well informed of a commanding officer, who, conſcious of the ſurgeon's neglect here, and which is too frequent in the army, has himſelf ſent an order to an inſtrument

maker, and ſtopped the price out of his ſubſiſtence.

INSTANCES have occurred, where a ſurgeon, even in England, (though almoſt every town where he quarters would afford them) has not been provided with any beyond a lancet, or two; and theſe alſo of a bad quality.* With regard to lancets, nothing is ſo dangerous as uſing bad ones. The force they require in piercing the integuments, puſhes them generally too far into the vein, by which the phlebotomiſt is in danger of going through it on the other ſide; of pricking an artery if it be in the way; or, what is not leſs dangerous, of wounding a nerve.

DR.

* THIS is properly ridiculed in a late publication, where the foibles of the officers of the Britiſh army, as well as the ſurgeons, are expoſed. Among other things, the ſurgeon is here ironically admoniſhed to *keep two lancets*; a *ſharp* one for officers, and a *blunt* one for the privates: "for," adds the author, "this will "be making a proper diſtinction between them."—There is juſt foundation for the ſarcaſm. Vid. Advice *to Britiſh Officers*, publiſhed in 1783.

Dr. Monro mentions to his pupils annually ſome caſes of this kind, one of which, I think, proved fatal; and the others were attended with no ſmall danger. One, if I miſtake not, was a lady, who only ſlightly pricked her finger with a needle. A ſecond was a gentleman, who, ſitting at table where a drinking glaſs happened to be broke, and by ſweeping off the pieces with his hand, a ſmall bit of the broken glaſs pierced it. Though this little ſcratch ſoon healed, it was ſeveral months before he was free from the danger it created. A gentleman in Middleſex* gives us three inſtances of it from bleeding; one of which had very nearly terminated in a locked jaw, and in death. Beſides, the cavity of the vein itſelf might enflame, and produce very alarming ſymptoms. If theſe ſometimes happen in the hands of ſkilful ſurgeons, with inſtruments of the beſt ſort, are we not to ſuppoſe they will happen more frequently

* Mr. Sherwen, ſurgeon, Enfield. Vid. Med. Comment. vol. 1. p. 210.

quently from bleeding with ſuch blunt lancets as we hinted at above?

I MIGHT give myſelf as an example of the dangerous effects of partial wounds in nerves.—In the autumn of 1782, while I was employed in examining the ſtructure and the joints of a horſe's leg, partly for my amuſement, and partly to demonſtrate the conſtruction to ſome officers fond of horſes, and who thought improvements might be made in ſhoeing them; while I was engaged with a ſaw in taking off the hoof, to bring into view the different parts of the coffin joint, and point out the thinneſs of the horny part, too much of which ſmith's injudiciouſly ſcoop away, I ran the teeth of it obliquely over the ſecond joint of my thumb; but ſo ſlight was the injury, that the cuticle was only raiſed, and torn a little; yet the pain and inflammation which ſucceeded in the part that evening, entirely deprived me of reſt. This continued unremittedly for upwards of a week, during which

which I ſlept little. Every thing that ſeemed to bid fair to allay the inflammation and irritation, was applied. It ſpread up to my wriſt; the part became numbed; I loſt both the uſe of motion and feeling in it; while the joint of the phalanx above that which was wounded became ſo painful on the ſlighteſt motion, that it created me great uneaſineſs. It continued ill for upwards of four months, and it was much longer before I could graſp any ſubſtance with that thumb, ſo ſmall as a pin. All this could not proceed from a wound ſo ſlight as ſcarcely to bring a drop of blood, had not ſome cutaneous nerve been partially wounded.

But to return. If the lancet be good, we have much leſs danger to apprehend. Almoſt the gentleſt force makes it penetrate the ſkin, while it ſlips with eaſe into the vein, and with little or no pain to the patient, who always complains ſeverely from a bad lancet. "All the other operations "in ſurgery," ſays the ingenious Mr. Bell,

Bell, ſpeaking on the ſubject of V. Section, "I have frequently ſeen well performed; "but I can with freedom ſay, that I have "ſeldom ſeen blood letting with the lan- "cet done very correctly. When properly "performed, it is really a neat operation; "but when not done with much exactneſs, "it is the reverſe."* The ſame author goes on to ſhow, that bleeding in other parts of the body may be attended with leſs danger, particularly in wounding an artery, than the arm, at the common place near the cubit, where blood is generally let. He mentions the feet, or the arm lower down than the cubit; or the jugular vein. A full ſtream of blood, he takes notice, may be obtained from the feet near the ancles, as well as from the arm. His advice is worth attending to. It certainly would render aneuriſms leſs frequent.

I HOPE, after what I have ſaid reſpecting the conſtitutions of ſoldiers, no argument need

* Bell's Surg. p. 64. vol. 1.

need be offered to obviate the common apology, that "any thing may do for a ſol-"dier." The ſuppoſition that they can bear ſurgical operations better than others, from a hardneſs and caloſity of feeling, is a falſe one; and to take it for granted without proof, and to act accordingly, is improper. I have on many occaſions ſeen an apparently ſtrong and robuſt man tremble at the ſight of a lancet, and faint away in the courſe of the operation, who, I dare ſay, would have undauntedly charged the enemy with fixed bayonet, or mounted a breach without fear. There is ſomething abhorrent in our nature at the deliberately wounding our fleſh. Some feel, we allow, more acutely and ſenſibly than others; but if I have found one who could hold the cup to receive the blood without being moved, or ſtarting in the leaſt at the prick of the lancet, I have found ſix of as delicate a mobility. And why ſhould it not be ſo? What could give riſe to the contrary ſuppoſition ſo injurious, as it occaſionally proves

to

to the ſoldier in his medical treatment? Have not many of them been as tenderly bred up, and accuſtomed, till lately, to as decent treatment, as the rank of mechanics and labourers allow? In their own houſes, we all know mechanics meet with no ſuch hard treatment in their ſickneſs from the faculty. Can a few months, perhaps a few days, ſo change their natures? We know the contrary. This can never take place, but by length of time and habit. Many of the ſoldiery ſuffer moſt in their health when they are leaſt able to bear it, *i. e.* ſoon after their entrance into the ſervice, before they become inured to the muſquet, or the duties it requires. We do not always find the loweſt orders of mankind in the ranks. If we enquire, we will often diſcover youths who have been tenderly bred up; and men long accuſtomed to better days. The ſon, perhaps, of ſome worthy clergyman, that the giddineſs of youth hurried thoughtleſs into this way of life. The once flouriſhing farmer; or the reputable tradeſman. I knew

knew inſtances of all theſe; of many whom misfortunes drove into the ſervice. Some indeed entered into it through folly. But we have ſpoken of this already.

While I am on the ſubject of V. Section, let me mention a caution, which I think neceſſary to lay before the young regimental ſurgeon. It is this: never to allow a ſoldier, on being bled, to uſe his firelock till at leaſt after two days, that the vein may have time to cloſe, and the cicatrix begin to form. As a ſoldier is never to be bled merely from his own deſire, but when the ſurgeon is convinced there is reaſon for it, this delay can be of no detriment to the diſcipline; for it is better his name ſhould remain two days in the ſick liſt than twenty.

In the autumn of 1781, I bled two privates for ſome trifling complaint, which did not require them to be continued in the hoſpital liſt. They were diſmiſſed accord-

ingly, and the ſerjeant, as uſual, took them out to duty. The conſequence was, that about a week after they both returned to the hoſpital with their arms not only enflamed, as if a nerve had been pricked, but with a pretty large tumor on each, ſomewhat reſembling an aneuriſm. It was hard, and did not, like the aneuriſm, yield or diſappear on preſſure. I mean the encyſted aneuriſm; the diffuſed aneuriſm does not yield, or diſappear on preſſure. I was, however, ſomewhat alarmed, leſt one or other of theſe accidents had taken place, of the bad conſequences of which I was well aware; but on examining the vein that had been opened, which in both was the median baſilic, near which no artery lies in the moſt common ſtructure of the arms, and diſtribution of the blood veſſels, I was ſatisfied that my fears were groundleſs; nor did I think a nerve had been pricked, becauſe the inflammation had not ſpread far up the arm, nor was any numbneſs in it, or other ſymptoms moſt generally accompanying that accident. I DI-

I DILATED the integuments above the orifice in the vein; applied the common digeſtive, with bread and milk poultice, over all; and as the inflammation ſtretched round the orifice a little way, I ordered warm ſtupes, in which wormwood and chamomile flowers were boiled, to be applied twice a day, as hot as convenient, an hour at a time. Theſe were continued more than a week. By this method they were both cured; but not till after the formation and diſcharge of a conſiderable quantity of pus. It was, however, ſix weeks before they could do their duty. My colleague happened that morning to bleed another ſoldier, who in like manner went to *drill*; and the ſame accident happened to him. The regiment was young, and the drill duty ſevere at this ſeaſon, to prepare for a review.

HAD any error happened either on his or my part, I ſhould have conſidered it incumbent on me to mention it here, as a caution to others. The accident, however, proceeded

ceeded from the violent exertions of the arm in exerciſing with the muſket. All this would have been avoided by giving charge to the ſerjeant not to take them to drill, or other duty that required the uſe of the arms, till the orifice had cloſed a little. Experience taught me my miſtake, in allowing them to go from the hoſpital that day; and it is mentioned now that others may not fall into the ſame. Mr. Bell's directions, not to bleed in the arm if other parts, as already mentioned, can be had recourſe to, will apply no where with more propriety than in the army. Had a vein been opened in the foot, or ſome where about the neck, the violence of exerciſe, which falls moſt on a ſoldier's arms, would not have affected them near ſo much, and theſe troubleſome tumors been avoided. And it may be added here, that the leſs danger will follow if the lancets be ſharp. The author above quoted aſſures us, he never uſes the ſame lancet twice, without ſending it to his cutler.—The form of the lancet, the poſition of the arm,

arm, (if we ſtill prefer the arm) after the vein is opened, the manner of applying the ligature, are all material conſiderations, though too little attended to.*

AMONG the ſurgeon's inſtruments, I muſt place an Inhaler, to be uſed in caſes of Cynanche tonſillaris, or inflammation of the throat. From the nature of a ſoldier's life, it is reaſonable to expect this will often happen. I have found it a very common diſeaſe. Mudge has given us an uſeful machine for this purpoſe.† But for regimental practice, it is not only too expenſive,

* VID. Bell's Surg. vol. 1.

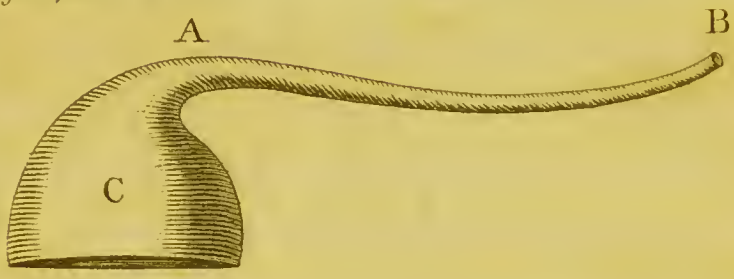
† THE merit of the invention of this inſtrument has been generally given to this gentleman, but improperly.—The ingenious Mr. Arden, Lecturer in Experimental Philoſophy, is the inventor.—It was with him Mudge firſt ſaw it, and, as he declares, upwards of twenty years ago. Mr. A. ſo long ago, had applied it with ſucceſs in ſeveral caſes. There is a clergyman in this place, who ſaw it with Mr. A. ſo long ago, as I have mentioned, which is many years before Mr. M.'s Eſſay on the Catarrh appeared. Mr. M. is ſaid to have improved it.

ſive, but likewiſe too liable to need repairs, which every mechanic is not capable of doing. As a convenient ſubſtitute, I have uſed a tube made of tin, for ſome years, which I find anſwers extremely well; and it is not only cheap, but ſtrong, and can be conveniently carried in the medicine cheſt. It is in form of a retort funnel; the mouth ſo wide, as to cover the mouth of a common tea-kettle; is about a yard long; and the narrow end bent a little for the convenience of holding it in the mouth. Through this the patient inhales the ſteams of warm water, either alone, or impregnated with the effluvia of herbs, *i. e.* medicated as the preſcriber judges beſt; the wide end being placed over the tea-kettle, filled with the boiling decoction. Three or four of theſe ſhould be provided, as they will coſt little above a ſhilling a-piece.

I MUST not omit here another inſtrument, as uſeful as any I have yet mentioned. This is a Tourniquet. It may ſeem ſtrange

I ſhould

opposite p. 263. Vol. I.



A. *The inhaling Tube*.....

B. *The part to be applied to the Mouth*....

C. *The part to be placed over a Tea-Kettle full of hot Water, &c*.....

The part B *to be wrapp'd round with a little Tow, to keep the Metal from scalding the Patient's Mouth*.....

I ſhould mention what is ſo common; but though it be one of the inſtruments now in almoſt every body's hands, that pretends to ſurgery, it is not always found in regimental practice. I have ſeen repeated inſtances here where its uſe was indiſpenſable, and where very clumſy, and indeed inadequate ſubſtitutes were had recourſe to in its ſtead. Abroad, and in the field of battle, ſubſtitutes of any kind may be pardonable, as any endeavour, however rough or inſcientific to ſtop an hemorrhage, may be better than nothing, and occaſionally ſave the patient's life; but in Britain or Ireland, to be ſo ill provided againſt accidents, will admit leſs of an apology; and ſince they are both cheap and portable, the ſurgeon who does not provide himſelf with them is blameable.

A STICK twiſted in a nooſe may anſwer tolerably well in amputations in hoſpitals, and the like, where ſkilful aſſiſtants are always employed to make the preſſure leſs or more, as it is neceſſary. I know ſuch are

uſed

uſed in very reſpectable hoſpitals in London; but ſtill this is different from the army. Beſides, there are occaſions when preſſure of this kind is to be applied for a length of time—for many hours together. Here a nooſe is almoſt inadmiſſible, for more reaſons than one. If a perſon is ſet over it, to hold it, as is ſometimes the caſe, it becomes a tireſome duty, and ſome neglect may happen detrimental to the patient. A ſingle twiſt more may make it too tight, and create uneaſineſs; one leſs may leave it too looſe, and allow the hemorrhage to continue. With a tourniquet this is not the caſe; it can be adjuſted to the greateſt nicety by the ſcrew; nor is there any fear of its giving way. In large wounds, where one or more arteries have been injured, and cannot be ſecured by the needle, it becomes neceſſary to apply a preſſure. Here the tourniquet is found much more convenient than thoſe methods hinted at above.

THE advocates for preferring a nooſe, will ſay, the ſcrew or the garters may break in the time of being applied, and a fatal hemorrhage follow before the tourniquet can be mended. But we have ſhown that a hemorrhage is much more likely to take place in the other. If the buckle and garters of a tourniquet be well made, which it is the ſurgeon's buſineſs to inſpect, their giving way during application will very ſeldom happen.

BED-PANS are never uſed in regimental practice, as far as I know, till I formed a contrivance of this ſort. Obſerving the great inconveniences the patients were often put to in getting out of bed, when nature's calls required; that in ſtates of great debility in fevers, the toſſing and irritation they ſuffered from being lifted was hurtful, I contrived a cheap bed-pan of tin. In form it reſembles very nearly the common pewter ones. It is ſmaller, and the tin folded down towards the inſide, by which it is ſo rounded

as to prevent inconvenience from the edges, while the patient has it applied under him. A few of theſe ſhould be kept; three or four are enough. They ſhould be procured at the expence of the regiment, not at the ſurgeon's, and may be reckoned among the hoſpital utenſils. They will only coſt about 1s. 6d. each, and will be found of very great ſervice in acute diſeaſes.

Under the head of inſtruments, I muſt place bleeding cups, with tape bandages to bind up the arm before V. Section. Though cups might likewiſe be procured for a trifle, yet I believe they are ſeldom found in regimental practice. I mean cups containing ſpecified meaſures, ſuch as are uſed by ſurgeons out of the army. Human blood is not to be ſported with. We ſhould never at one veneſection take more than is judged ſufficient to anſwer the end; nor are we to take leſs. But how can this juſt medium be ſtruck, when the blood is either received in a large veſſel, the meaſure of which we are

are unacquainted with, or, which is the ſame as to effect, unable to aſcertain when the proper quantity has flowed into it; or it may be, the blood flows on the ground.—This laſt I believe ſeldom happens; or when it does, it is in emergencies only.

A GREATER miſchief will happen from taking too much, than too little blood. We can eaſily repeat our operation, if we find, by the appearance of the blood, and other ſymptoms of the patient, too little has been drawn off. But we may never be able to repair the miſchief done by too large a V. S.

WHEN large V. S. are inſtituted even with propriety, they never fail to induce debility. The ſyſtem is always left in a ſtate of weakneſs proportioned to the quantity loſt. In pleuriſies, where it becomes indiſpenſably neceſſary to draw off large quantities to preſerve life, or obviate chronic diſeaſes that may induce certain, though ſlow death, we find the patient long convaleſcent, and health

health tardily eſtabliſhed. In other fevers, where the energy of the brain is more affected, and where the nervous ſyſtem chiefly ſuffers, if incautiouſly had recourſe to, it renders thoſe functions weaker, and more languid, whoſe powers were already too much ſunk. Common obſervation has eſtabliſhed the truth of this remark.

When the ingenious writer of a pretty little novel*, lately publiſhed, makes Lindorf, one of the characters of the piece, give a narrative to his friend, the Count de Walſtein, of what had happened to him from their laſt ſeparation, he ſays, "Quelques "heures après mon arrivée," (à Hamboure) "je fus ſaiſi d' une fièvre ardente, qui dura "pluſieurs jours; un médicin que l'hôte "fit appeler, me fit ſaigner ſi abondament, "qu' une foibleſſe exceſſive ſuccéda à la "fièvre, et retarda mon depart."—It was neceſſary to detain this young nobleman here

* Caroline de Litchfield. Tom. 2. p. 210.

here ſome time; he is therefore thrown into an inflammatory fever. The landlord of the inn where he lay calls an ignorant practitioner to his aid, who bled him ſo largely, and weakened him thereby ſo much, that it was long before he recovered its debilitating effects to be able to purſue his journey; as probable a means ſurely for the purpoſe, as any the writer could have deviſed.

PERKINS, a young man about 22, of the light company, was admitted on the ſick liſt in the beginning of the ſpring 1781. His complaints were chiefly pains acroſs his loins, with ſome, though little pyrexia; the pains were what he complained moſt of; they were looked on as rheumatic; the weather had been cold, and the drill duty, for ſome time, ſevere, eſpecially to recruits, and he was but a few months in the regiment. He was blooded immediately; a pound at leaſt was drawn off, and ſome febrifuge medicines adminiſtered; he was put to bed; but

but by next morning a total paralyſis from the middle downwards had taken place.

Coagulable lymph appeared indeed ſeparated on the ſurface of the blood; but it was plain V. S. had been proſecuted too far. The deed was done: it could not now be remedied. Eight ounces might have proved ſerviceable, but double this—for he muſt have loſt double—was beyond what his habit could bear with impunity. The blood flowed into a large tin veſſel, uſed for culinary purpoſes; the exact meaſure unknown, and the quantity therefore taken away by gueſs. Every means was uſed now to reſtore ſtrength to the habit, and recover the loſt tone of the extremities: all in vain: he grew daily worſe. The inteſtinal tube, with the urinary organs, partook ſoon of the affection; both fæces and urine paſſed involuntarily; he became emaciated; and, to add to this, by conſtantly lying in one poſture, except when turned by the orderlies, both the bones of the ilia and hip

hip burſt at length through the ſkin. In ſome time, notwithſtanding every care, theſe and ſome other ſores produced, in the neighbouring parts by the ſame means, mortified. He lingered two or three months from the firſt in this miſerable condition, when death at laſt put an end to his ſufferings.—It appeared to me, the whole train of theſe evils were to be attributed to the too great loſs of blood; and that a more ſparing uſe of the lancet, with the exhibition of ſuch medicines as were afterwards adminiſtered, would have ſoon reſtored him to his health and his duty.

To obviate the inconveniency that may ariſe from ſuch gueſſed work, it is very eaſy to procure cups of tin, or pewter. Theſe may be as conveniently carried about with the regiment as the ſkillet, or kettle; even much eaſier, as they are of a leſs ſize. We ſhould, I think, have the following, *i. e.* one of eight ounces; one of four; and one of two. Theſe three will anſwer every purpoſe.

poſe. Suppoſe we intended to draw off a pound of blood, our eight and four ounce cups make juſt the quantity; if ſix ounces, our four and two amount to it; if ten, our eight and two; if twenty, (for ſuch large bleedings may ſometimes be neceſſary in great degrees of active inflammation, and in phlethoric ſubjects) our eight, four and two, are fourteen. The two laſt may be emptied and again filled, which amount to the quantity required. If we wiſh to let blood to fourteen, or ſixteen, we can compute it in like manner, and thus exactly fulfil the intention.

A FEW yards of tape are equally as neceſſary to bind up the arm before V. Section; for the ſoldiers ſeldom have garters ſoft enough for this purpoſe. They are either liſting of cloth, or other coarſe ſtrings, very inconvenient for this end, as not ſufficiently compreſſing the artery. Their garters may anſwer well enough to bind the orifice after bleeding; for we ſhould not give our bandage

bandage for this uſe, as it would be twenty to one if ever they were returned; and to buy on every occaſion when V. S. was to be performed, would at length become expenſive. As to directions in the operation itſelf, this is not my buſineſs to point out. I refer him to books profeſſedly on the ſubject.

AMONG the inſtruments, I muſt mention a contrivance, which will be of great utility to the ſurgeon; and though, ſtrictly ſpeaking, it does not belong to the head of inſtruments, yet this ſeems the propereſt place to inſert it. This is a bathing tub. The uſe of baths, both hot and cold, will as often be found neceſſary in regimental, as in other practice. A tub may be made at very little expence, which will anſwer every purpoſe of this kind; but it ſhould be at the regiment's, not the ſurgeon's expence. It may be made from a couple of old arm cheſts, and of the ſame ſhape, about four feet deep, and of ſuch a length, that

the talleſt man of the regiment can ſtretch himſelf in it. Nor ſhould it be any wider than juſt to allow a man to turn eaſily. To make it water tight, it muſt be caulked. Made in this manner, a ſmall quantity of water will ſuffice. When the hot bath is wanted, the water can be heated with little inconvenience. On marches, it will ſerve to pack ſome of the baggage in, and thus anſwer a double purpoſe. When ſoldiers are convenient to the ſea, they ſhould bathe in it; but this is not always the caſe; then it may be neceſſary for cold bathing.

I SHALL paſs over cupping glaſſes, and ſcarificator, as they naturally make part of a ſurgeon's inſtruments. I am ſure they ſhould be always included. Very great advantage is derived from them in caſes of local pains, where topical congeſtion and inflammation have taken place, perhaps more than from any other means whatever.

LEECHES

LEECHES cannot be conveniently carried on marches: but every town will supply them when wanted. I conſider them likewiſe as a part of a ſurgeon's inſtruments. It is enough here only to hint their utility; every medical practitioner is convinced of it. I have purpoſely omitted an enumeration of every inſtrument which a regimental ſurgeon ſhould poſſeſs, becauſe I have comprehended the whole under the words *proper ſets*, which every inſtrument-maker knows, and which are generally ſold together. The particulars I have pointed out are ſeldom attended to, though not leſs neceſſary: indeed they are almoſt daily called for; and at leaſt nine times out of ten, where we employ the amputating knife, will we have occaſion to uſe theſe.

AMONG his inſtruments, I ſhall place likewiſe bandages. The chief complaints where theſe are uſed, are for ſore legs: and I would prefer ſuch forms of them as are recommended by Rowley, Underwood, and

others,

others, who have written on the ſubject of ulcers of the lower extremities. A regimental ſurgeon ſhould be provided with a proper number. When the frequency of this diſeaſe is conſidered, a dozen is the leaſt he ſhould have in his cheſt. As authors have given proper directions for making them, I muſt refer my readers to the writings of thoſe gentlemen. I have hitherto neither ſpecified Catheters, male nor female, though both ſhould be in his poſſeſſion.—He will find frequent uſe for the male catheter among the ſoldiers; and ſince the women of the regiment will often call him in their ſickneſſes, he will as often ſtand in need of his female catheter. The ſmall expence that the female catheter will ſtand him, will be amply compenſated by the good name he will obtain among this part of the army. Officers are always well pleaſed to ſee their ſurgeon attentive to the poor ſick women; as they know he is not obliged to attend them, it impreſſes their minds with the greater opinion of his humanity.

He

He ſhould always be provided with a good accurate thermometer. This will be uſeful on many occaſions. He can by this not only aſcertain the patient's heat in fevers, but the temperature of the air, room, &c. the temperature of the water applied in the hot bath, which is abſolutely neceſſary, and many things of this ſort.

I have taken no notice of ſyringes; but I am of opinion they are not leſs uſeful than ſome other things enumerated under the head of inſtruments. Injections are much in uſe for the cure of gonorrhoea, and very properly, when not depended on entirely as a cure in virulent caſes of it; or where there is a true venereal infection. In relaxations, &c. they anſwer happily. He ſhould have at leaſt a dozen always ready to lend out to the men, but under a penalty, if loſt. Pewter ones are cheapeſt, and anſwer very well. He will find occaſion for them in other caſes, beſides this, viz. in ſyringing the ears, in ſquirting medicines into, or waſhing out ſinuſes, &c.

Fix-

FIXABLE air has for ſome years paſt been much recommended in phyſic in febrile affections; and it proves to be no inconſiderable medicine not only here, but in many other affections. Some convenient apparatus, better adapted for the army, than thoſe in common uſe, ſhould be invented; where they would not only be cheaper, but could be tranſported with more facility, and leſs danger of breaking. It matters not whether they be of glaſs, provided they are of ſuch materials as the vitriolic acid cannot corrode, or at leaſt corrode without imparting a quality or impregnation to the water, injurious to health. As we uſe iron to give the water a chalybeate quality, which adds conſiderably to its virtue, perhaps our apparatus might be made of this metal.—That invented by Dr. Prieſtly, in the rude days of the diſcovery, may, however, anſwer; and it can be eaſily procured any where, or almoſt in any ſituation. In the army, elegance muſt give way to convenicency in many things. This may be found

deſcribed,

deſcribed, and a draught of it preſerved, in Elliot's treatiſe on Mineral Waters, where both Dr. Prieſtly's pamphlet on the ſubject, and the apparatus, are tranſcribed, and to it I refer. But in the adminiſtration of fixable air in putrid fevers, and ſuch like, perhaps the method mentioned in the Commentary on the ſubject by Dr. Dobſon, may ſtill be preferable. It ſeems at leaſt to take place of the common neutral draughts, made by mixing the acid and alkali previous to exhibition, where ſo much of this valuable gaſs, on which the greateſt part of the good effects of the medicine depends, evaporates by the act of effervescence.

The manner directed in this commentary is extremely ſimple. A certain quantity of alkali is firſt diſſolved in ſome water, then drank, and as much acid, either of lemons or diſtilled vinegar, as we know a priore, capable of ſaturating the alkali, is immediately to be ſwallowed. The extrication of the fixable air muſt take place in the ſtomach,

ſtomach, and unite with the contents of it, and otherwiſe be abſorbed in greater quantity, and more effectually, in the ſame ſpace of time.

Since the electrical fluid bears ſo large a ſhare in the operations of animal and vegetable life, as our late diſcoveries with regard to it evidently ſhow, it is but reaſonable to ſuppoſe that health is greatly influenced by it; and indeed experiments inconteſtably prove the fact. Its permeability, which is perhaps beyond all other fluids in nature, would ſeem to render it almoſt the only effectual remedy in ſeveral diſeaſes. In ophthalmies its utility is atteſted by many well authenticated cures.* In chronic rheumatiſm, we are told, it has proved a cure after all the articles of the Materia Medica ever preſcribed for this complaint have failed. It has alſo been found no leſs uſeful in hemiplegia. In the form of lightning,

* Vid. Cavallo, on Med. Elec.

ning, it has diſcuſſed tumors on the breaſt.* This happening accidentally, perhaps gave riſe to its application to indolent tumors of a ſchirrhous nature, which we often find it ſucceſsfully remove. We know alſo its beneficial effects in paralyſis, as well as other diſeaſes where the nervous ſyſtem ſeems chiefly to be the ſeat of the complaint. It has alſo removed deafneſs, a caſe of which we find related in the Med. Comment. vol. 1. p. 370.

SINCE all theſe often occur among ſoldiers, regimental ſurgeons ſhould undoubtedly have contrivances for its application. The many portable machines for electrical purpoſes, now in common uſe amongſt all claſſes, and made by common mechanics, render its application in the army not only practicable, but eaſy and convenient, while the cheapneſs is no ſmall inducement to their purchaſe. I have ſeen very neat ones,

* Vid. Bohadch de util. Electric. in Art. Med.

the glaſs cylinder, from a foot to fifteen inches in circumference, ſold for little more than a guinea, with conductors, knobs to draw the ſparks, chain, Leyden phial, &c. Theſe are made ſo portable, that they may be packed up in a box about a foot and half long, and ſo commodiouſly at the ſame time, that little is to be feared from the jolting of the waggons in marches, with reſpect to their breaking. To theſe ſhould always be added an Electrometer, as it is abſolutely neceſſary to know the ſtrength of the electricity, leſt a neglect in this point ſhould be followed with diſagreeable accidents, and bring its farther application unmeritedly into diſrepute.

Fomentations, ſhocks, and ſparks, are the three ways commonly now had recourſe to in its application to the human body. The operator ſhould be properly acquainted with the nature of conducting theſe, in order to render the electricity as effectual as poſſible; and for this reaſon it will

will be expedient that he apply himſelf a little to the ſtudy of electricity. What is neceſſary for his purpoſe, *i. e.* its general ſtimulant effects, he may in a ſhort time comprehend, and practice will render him ſufficiently expert in its application. It is not abſolutely neceſſary that he ſhould be a deep Electrician, though the more he knows of this branch of natural philoſophy, the more he will know of nature; and will the better underſtand how to vary the application to accompliſh his intention.

That it is a powerful ſtimulus is proved from the perſpiration it induces on the part to which it is applied; and that it conſtantly, as well as intimately pervades the body, is likewiſe demonſtrated from applying it to a perſon during V. Section. If the blood only falls in drops from the vein, let the perſon be electrified, and it will now run in a full ſtream. If a capillary ſyphon be filled with water, which from the ſmallneſs of the tube can only fall from it in drops,

drops, let it be electrified, and the water will iſſue from it in a number of ſeparate fine ſtreams.

It renders bodies lighter, whether ſolid or fluid. To prove this, we have a number of experiments by Bohadch. I ſhall not take up the reader's time by a detail of them, but only preſent him with ſome of the author's concluſions, which are, "that electricity encreaſes the natural evaporation of fluids, unleſs ſuch liquids are poſſeſſed of a great degree of vicidity, as is the caſe with olive oil.

"That this encreaſe in the evaporation of liquids, produced by electricity, is in proportion to their degree of volatility.

"That this encreaſe of evaporation, ſo produced on liquids, is in proportion to the extent of their ſurfaces, expoſed to the atmoſphere; and that electricity has an evident effect in diminiſhing the weight even

even of ſolid bodies, when ſuch a quantity of moiſture is contained in them as is neceſſary for the purpoſe of evaporation."

He produces an experiment to prove, that electricity being applied for ſome time to veſſels replete with fluids, an encreaſed diſcharge of their contents is thereby always produced. This is ſimilar to what we have already ventured to aſſert; but as an illuſtration, I ſhall relate his experiment.— "Let a common egg," ſays he, "be perforated at one end, ſo as to diſcharge all "its contents, both the white and yolk; "and a ſyphon being introduced ſo as not "to touch the bottom of the egg, let it be "completely filled with water, and then "weighed: the egg is then to be emptied "by making the water paſs through the "ſyphon, and by weighing again it may be "known exactly what quantity of water is "diſcharged in a given time. The egg is "now to be filled again, and on being

"electrified

" electrified for ſome hours, the water con-
" tained in it will be found to flow with
" much greater rapidity than when no elec-
" tricity was applied."

THE ſame author has taken ſome pains to ſhow its effects in promoting vegetation; but this being foreign to the preſent purpoſe, ſhall be paſſed over. Afterwards, he goes on to prove, by various experiments, the power of electricity in promoting the natural perſpiration of animals. Theſe were made on whelps, pigeons, and other animals, all which demonſtrate the great activity of this fluid, and its power over the body.*

SOME contend that electricity poſſeſſes a ſedative, as well as a ſtimulant power. This they affirm is proved from its effects in eaſing pains. Shocks and ſparks, ſay they, act by a ſtimulant power, while the aura, or

* Vid. Bohadch de utilit. Electricit. in art. Med. ſeu in morb. Curand.

or electrical fomentation, gradually received into the body, acts ſedatively. Whether this be fact or not, we ſhall not ſtop here to enquire. From the power, however, it poſſeſſes, of intimately pervading the fineſt tubes, it has been ſucceſsfully applied to diſcuſs obſtructions of the glands. We hinted at this before. Hence it has been found, that venereal bubos have been more ſpeedily removed by it, than by any thing hitherto known. In the ſummer of 1782, an ingenious* phyſician told me of a very obſtinate caſe of this kind completely diſcuſſed by electricity in about three days.—Some have little faith in it; but becauſe it does not cure all caſes to which it is applied, is that a reaſon for altogether rejecting it?

If there was no other diſeaſe in which it was ſucceſsful, but in bubos, this one alone, ſo frequent and ſo troubleſome in the army, ſhould

* Dr. Macqueen.

ſhould induce us to try it. Every practitioner in the army knows too well the many inconveniencies that daily ariſe from bubos both to himſelf and the patient. For my part, they have proved in my practice, far more troubleſome than ony other venereal ulcer I meet with.

WHATEVER ſome may advance to the contrary, I am perſuaded, no advantage is obtained by encouraging ſuppuration by the application of poultices. As it is never ſafe to truſt to the diſcharge of a bubo, for the compleat expulſion of the venereal virus, but highly neceſſary to adminiſter its well-known antidote, mercury, we need not be anxious whether abſorption from the enflamed glands ſhould take place. The mercury meets the poiſon, and will deſtroy it. On the contrary, let us ſuppoſe the bubo opened, and a collection of matter diſcharged; are we ſure no abſorption takes place to infect the ſyſtem? Can we boldly venture to affirm, that the virus is

all

all expelled at the opening? What hinders abſorption now? Nay, I am apt to think this the readieſt time for it to be performed. We know that in the inoculation for the ſmall-pox, abſorption of the virus does not take place till after ſuppuration, and a multiplication of the matter inſerted. This is proved by the infected piece having been cut out after the inflammation had begun, and by this means the ſmall-pox prevented.—Now, as a multiplication of the matter happens in the bubo, and as we muſt allow that every particle of it is tainted, the lymphatics muſt take ſome of it up, and convey it to the blood. Beſides, there is reaſon to ſuppoſe the abſorption will go on in proportion to the ſurface laid open. Hence this operation of the animal œconomy muſt be even greater after the bubo is opened.

If this be true, it follows, that we ſhould never truſt the cure to a ripened bubo, but always give mercury. If the bubo be ſo far advanced, before we ſee the patient, that

a fluctuation of matter is perceptible, and diſcuſſion impracticable, it appears to me a ſafer way to allow it to burſt, than to open it either with the knife, or with cauſtic. Although I never ſaw an accident from this which ended in death, yet ſuch have been ſaid to happen. A large and principal artery lies in the courſe of the gland, where the matter generally forms. If we ſhould inadvertently run the knife too deep, and wound it, death muſt be the conſequence, as I ſee no way by which the hemorrhage could be ſtopped; and in different ſubjects this veſſel is differently ſituated. In one it lies deep, and out of the way; in another not only more ſuperficial, but may otherwiſe vary in its courſe. But ſuppoſing the wounding of this veſſel eaſily avoided; to heal up the part is often found impracticable. I have ſeen bubos for many months continue to diſcharge. I have ſeen ſinuſes form, and the ſore often put on very alarming appearances. In the autumn of 1781, I had a female patient, who died from a mortified bubo.

bubo. She was a girl of eaſy virtue, and had been neglected till the mortification had actually taken place. When I ſaw her firſt, ſhe was in a high fever, and not knowing either her way of life, or that ſhe laboured under a venereal diſeaſe, I preſcribed for her fever only. The diſagreeable odor in the room, I attributed to fæces left in the pot, and ordered the room to be cleaned out, and theſe removed. She lived alone, but had a father in the neighbourhood, who now came to ſee her. As ſhe was conſidered by ſeveral, equally ignorant of her way of life as myſelf, in the light of a poor unfortunate girl, that had got a fever, ſome well-diſpoſed perſons, hearing of her diſtreſs, ſent her nouriſhment; and a ſmall collection of money was made for her. On my next viſit, her father took me aſide, on complaining that the ſmell ſtill continued, and informed me of a *ſore ſhe had on her thigh*; on examining I found one of the moſt diſagreeable ſores in her groin I had ever ſeen.

She confeſſed the nature of it; that ſhe had been ill of it ſeveral months, and that nothing applied could heal it. I dreſſed it, though a moſt diſagreeable taſk; but the fever ran high, and the mortification had proceeded too far, having penetrated quite through the abdominal muſcles, and her ſtrength ſinking, ſhe died in a ſhort time after.

I was informed by a phyſician of veracity, in December 1783, of a friend of his in Edinburgh, who has ſuffered in a moſt ſevere manner from the ſame cauſe. It is upwards of two years, he ſays, ſince the bubo was opened, but no medical treatment has ſucceeded in healing it, though the moſt eminent of the faculty have given their advice. The motion of the thigh is now greatly impeded, and it will be well, my informer adds, if the limb, in ſome time, will admit of any motion.

A surgeon of a militia corps informed me, in 1782, of a ſoldier that died from the ſame

ſame cauſe. The gentleman already mentioned* told me, while he attended lectures in Edinburgh, he ſaw a caſe of the ſame kind, of a very obſtinate nature, under the care of Dr. Hope, that had very nearly proved fatal to the patient. And I may add one in my own practice. In autumn 1782, Wright, a grenadier, affected in a ſimilar manner, was put under my care. The part mortified, and with great difficulty the progreſs was ſtopped by the uſe of hemlock in poultice, applied over the ſore, and ſtupes of the warm decoction of the plant. He had been ill, it ſeems, near two months before I ſaw him, and he was after this near four months in the hoſpital before he could leave it to do his duty.— The caſe is as follows :

In the month of Auguſt 1782, Matthew Wright, a grenadier, was ſent under my care for the cure of a venereal bubo. His general

* Dr. Macqueen.

ral health was, when he came in, pretty good, and there were no other marks of the venereal diſeaſe about him. On further enquiry into his caſe, I found he had been ill at St. Alban's, where he contracted this bubo, and where about two months before it had been opened by the ſurgeon then attending the regiment.

He had been ſomehow neglected after the opening was made; the ſurgeon perhaps ſuppoſing that nature would perform the reſt of the cure, without any farther interpoſition of art.

In the mean time, the regiment to which he belonged was ordered to encamp on the Suffolk coaſt. This was a long march for a perſon in his ſituation; they halted, however, at Newmarket for ten days; yet nothing was done till he was ſent to the hoſpital in camp.

On examining into the ſtate of the ſore, I found that part of the opening made had cloſed up; but a ſinus was formed upwards of two inches and a half long, ſtretching upwards towards the abdomen, running between the ſkin and the muſcles. I tried for ſome weeks to dry up the diſcharge, which was pretty copious, and heal up the part; but my endeavours were in vain, and his general health, probably from confinement, as well as from the diſcharge, was diminiſhing apace, and he grew conſiderably emaciated.

I resolved at length to lay the ſinus open, which being done, I found both a calloſity and blackneſs in the courſe of it. This I endeavoured to remove, by Tinct. of Myrrh, and the Green Digeſtive; and at laſt red precipitate was ſprinkled over it. All would not do. He was carefully dreſſed twice a day by myſelf, for I would truſt him to no other; and over the dreſſings were applied poultices of bread and milk, to bring

bring down the inflammation that ſurrounded the ſore. All this was ſtill to no purpoſe. The diſcharge encreaſed, was fetid and ill coloured, and I feared a gangrene and mortification, not only from the ichor and general appearance of the ſore, but from the inflammation that ſpread to a great diſtant round it over the integuments. He had till this taken a mercurial pill of two grains, night and morning, ſince he came into the hoſpital, but it was now left off.—He ſuffered much; neither could he enjoy any refreſhing ſleep, or mitigation of his pain, though he had got opium from one grain to four at a doſe. I put him upon a courſe of bark and wine, and encreaſed each till he drank a bottle of the one, and took an ounce and half of the other daily. The ſore not only now ſpread, but ſunk deeper into the muſcular ſubſtance.

The integuments ſeparated entirely from them up to the os ilium, and forwards on the abdomen, towards the umbilicus, ſo that by

by lifting up the edge of the ſkin, a great part of the abdomen on this ſide could be ſeen under it. The cellular ſubſtance connecting them together, melted down, while the gangrenous purpureo-ſcarlet colour ſtill advanced externally.

I APPLIED now every means in my power to obviate mortification. The medicines already mentioned were adminiſtered with punctuality, and ſtupes, compoſed of decoction of camomile flowers and wormwood, were applied as warm as he could bear them, an hour at a time, three times a day.

HOT flannels wrung out of them were clapped over the ſore, and as ſoon as one grew cold, another was applied, which, from the penetrating nature of the vapour, I judged would infuſe their antiſeptic qualities better than if the decoction itſelf had been uſed. When this was finiſhed, warm digeſtives were laid on, and over all a large

poultice of bread and ſtale beer, renewed likewiſe three times a day. To this was added a generous diet, for his appetite did not fail ſo far as to prevent him from eating pretty ſtrong food.

WANT of ſleep, and apprehenſion perhaps of his own danger, had rendered his pulſe quick and weak, though he had nothing that he called ſickneſs, ſave the uneaſineſs from his conſtant pain.

I STILL continued to flatter him with hopes of a cure, to prevent depreſſion of ſpirits as much as poſſible, which is always an enemy to recovery from any illneſs whatever.

WHILE things were in this deſperate condition, I called at Yarmouth on the ingenious phyſician, then of that town, already mentioned. I related the caſe to him, while he in return related to me one of a ſimilar kind from the ſame cauſe, (and a ſoldier

ſoldier alſo) which he had ſeen in the Royal Infirmary of Edinburgh, and which was cured by hemlock poultice.

I PROCURED a quantity of the ſtalks, made a ſtrong decoction of them, with which I ſtuped his ſore, as warm as he could bear, for about half an hour; then took a ſyringe, and threw it underneath the ſeparated ſkin, where the ſtupe could not reach, applying the warm hemlock poultice, boiled up with ſome crumbs of bread over all, making it ſo large as to cover the whole enflamed part.

THIS was about 11 A. M. and about 3 P. M. theſe were removed, and the ſame treatment repeated. About eight the ſame evening this practice was again had recourſe to, and he got only a pint of wine this day. Next morning, when the dreſſings were removed, I found almoſt all the inflammation gone from the integuments, the ſore emitting a leſs diſagreeable ſmell, though I could

could not ſay, the diſcharge of ſanies was leſſened, nor the colour of the ſore more favourable. The ſame treatment was continued this day, with the addition of a ſcruple of pulvis Cicutæ, made into a bolus, with honey. I leſſened the quantity of bark to ſix drams, and from this to three in a ſhort time after.

He ſlept ſome this night, which he had not done from the intenſe pain for many nights previous to this; and the ſucceeding night ſtill more, till his reſt gradually became as refreſhing as in his former health. The wine was gradually left off alſo. In ſhort, by purſuing this treatment, in three days the inflammation was not only entirely gone, but the wound ſweetened, and altogether cleanſed from the blackneſs that had all this time adhered to it, for the ſloughs fell off, leaving the recti, and oblique muſcles, red and well looking, though the mortification had penetrated quite through them. From this time he continued every day

day to mend. Had not this plan been happily hit on, I am confident he muſt have ſunk in the ſpace of 48 hours, at moſt, from the time this application was firſt made.

SINCE this I have experienced the good effects of hemlock water and poultice in two caſes of ulcerated legs, both of which were in a very bad condition, being extremely foul.

I DOUBTED for ſome time whether I was to attribute the cure to the hemlock poultice and powder, given internally, or to the water with which the ulcer was ſyringed. A fourth caſe of venereal ulcer, however, ſoon came under my care, which happened very fortunately to put this to the teſt.

THE ulcers were extraordinarily foul on each ſide above the os mali, or about the temples. Neither powder or poultice was applied, but they were carefully ſyrenged twice

twice a day with the decoction of hemlock, and in a ſhort time they began to mend: from whence I conclude, that the hemlock water applied to foul ulcers, not only cleanſes and diſpoſes them to heal, but mitigates the pain, proving beneficially ſedative.—The ſyphilitic patient, I now mentioned, ſuffered for a long time much pain from theſe ulcers, which were under the care of a regimental ſurgeon, and only dreſſed with common digeſtives, till he was ſent into the hoſpital.

THUS far of the dangerous effects of opening bubos. Was it neceſſary to give more authorities, of their bad effects, I might quote Plenck. Theſe, however, may ſuffice.

BUT if the opening of bubos ſtill be inſiſted on, a queſtion ariſes which has been much agitated, whether cauſtic or the knife be preferable. Mr. Pott, whoſe authority is great in all caſes of ſurgery, prefers cauſtic. He

He affirms from his own experience, that caloſities round the edge of the ſore always follow the uſe of the knife, which never happen from cauſtic. Mr. Sheldon and others I have heard confirm the ſame. Yet notwithſtanding theſe authorities, I would venture to ſay, if the bubo be properly ſuppurated, and the integuments rendered ſufficiently thin, it will be of little conſequence whether a knife, the cauſtic, or a puncture made by a lancet, gives vent to the ſuppurated matter.

From the unfortunate caſes I have ſeen, I ſhall on all occaſions endeavour in my future practice in this diſeaſe, to diſcuſs bubos; and for this purpoſe in obſtinate caſes I confeſs I entertain conſiderable expectations from electricity. A regimental ſurgeon can never make the labour, requiſite in applying electricity, any objection, ſince he has always men enough at his command capable of giving their aſſiſtance. One or more orderly men are conſtantly in the hoſpital,

pital, and with very little trouble they may be taught to apply it ſufficiently well, at leaſt with his inſpecting the whole.

THIS, which I would place among a regimental ſurgeon's inſtruments, is, as far as I know, little uſed in army practice; but from the ſucceſs that has followed its application in many diſeaſes, beſides what has been mentioned, it is to be regretted its uſe is not more univerſal. Perhaps there may be ſtill diſeaſes for which it has never yet been tried, that might yield to its influence. Time, however, and opportunities of making ſuch experiments, will determine this point. It becomes our duty in the mean time to apply it where we have the teſtimony of experience, and the aſſiſtance of rational argument to determine in its favour. I know ſome eminent phyſicians who are not very ſanguine in their hopes from electricity; and who contend they ſpeak from being repeatedly diſappointed by

by it in their expectations. But others, and these not a few, speak as confidently on the other side; and I am inclined, from what we know of the nature of this subtile fluid, to join them in its favour.

CHAP. IX.

Of the peruſal of Books, and of ſome which ſhould form part of his Library.

BOOKS, without doubt, the regimental ſurgeon ought to peruſe. Without an almoſt daily application to them, his practice muſt be mere quackery, and his views confined. We have here the advice of the immortal Bacon to inſtigate us, whoſe opinion, as well as example, we need not bluſh to follow. "Books," ſays he, "will ſpeak, when counſellors blanch; therefore it is good to be converſant with them."*

ONE principal uſe of reading will be, to know what the medical world are doing; or what they have done; and to repeat their practice, or condemn it, as he ſees fit, and

* Bacon, of Counſel.

and as his own judgement directs him. By reading, he will become acquainted with the opinions of the moſt eminent of the profeſſion; and he may be ſtimulated to excel, as many of the authors, whoſe works he peruſes, have done. By reading, united with opportunities of practice, he will be able to make uſeful obſervations. A correſpondence alſo with reſpectable and learned men of the profeſſion, will enable him ſtill farther to practice ſucceſsfully. He will know all the diſcoveries made in philoſophy, and chiefly diſtinguiſh what more immediately belongs to his own profeſſion. He will obſerve the fallacies of theoretical opinion detected by fortunate facts; for medicine, like other branches of ſcience, is progreſſive; and thence he will be early enabled to form his practice, and rectify it accordingly: while he that reads little, and converſes leſs with men of the profeſſion, muſt go on in a common, though erroneous tract. Thus information will enable him to reject haſty and ill-grounded

concluſions, or confirm his doubtful conjectures, which he now ſees were founded on rational induction.

I DO not mean here a too exultory plan, without any regular method. Some object ſhould always be held in view, to which his reſearches ſhould ultimately tend. The learned Zimmerman ſays, "it is not too "extenſive a reading that renders a man "learned. Reading in general impairs "ordinary minds. They ſoon become like "a ſieve, and retain nothing that is thrown "into them. It ſeems right to adopt a "middle way between the two extremes."*

IN another place he tells us, what we muſt acknowledge, that "erudition may be "diſtinguiſhed from true learning. Eru-"dition, conſidered by itſelf, is a mixture "of good and bad things, often contra-"dictory to each other, and badly digeſted; "which

* Experience in Phyſ.

" which burthen the memory at the ex-
" pence of common ſenſe, and render the
" ſimply lettered man rich in proviſions,
" that are uſeleſs, and poor in ideas; great
" in minute things, and very little in great
" ones.

" The moſt learned phyſician is there-
" fore a very uſeleſs man, if he has not read
" rather with a view to improve his genius,
" than to burthen his memory; and to
" collect together intereſting truths, rather
" than to accumulate words."

" TRUE ſcience," ſaid Plato and Ari-
ſtotle, " conſiſts not ſo much in knowing
" and adopting what others have known,
" as in judging within ourſelves on what
" we read or ſee. It conſiſts in ſeizing the
" true ſpirit of a thing; in ſeeing it in its
" true light; in diſtinguiſhing what men
" have added to it; in ſtrengthening our
" judgement, and ornamenting our me-
" mory; in extending our knowledge;

" and,

" and, in ſhort, in being the dupes neither " of men, time, place, nor authority. This " is true ſcience." Erudition and true learning may be contraſted, as a modern poet has done knowledge and wiſdom.—

Knowledge and wiſdom far from being one
Have oftimes no connection. Knowledge dwells
In heads replete with thoughts of other men,
Wiſdom in minds attentive to their own.
Knowledge a rude unprofitable maſs,
The meer materials with which wiſdom builds,
Till ſmooth'd, and ſquar'd, and fitted to its place,
Does but incumber whom it ſeems t'enrich.
Knowledge is proud that he has learn'd ſo much,
Wiſdom is humble that he knows no more.*—

I MUST not take on me to point out all the different authors the regimental ſurgeon ought to read. His own judgement muſt in a great meaſure guide him here. But if he poſſeſſes a real deſire for improvement, he will not be ſparing in this point. It has been often ſaid, that to read little, and reflect

* Cooper's Poems. Vol. 2. p. 235.

flect much, is the ſureſt way to improvement. The rule, I believe, in a general ſenſe, is good. For to read over a certain number of pages, without digeſting them, without making ourſelves maſter of the author's arguments, and entering into his views, is as bad, with reſpect to the improvement we receive, as reading none; for the memory retains nothing of ſuch ſuperficial peruſal, ſince neither the attention nor the judgement were engaged. This may be called reading to kill time; and we might as well peruſe a novel, as a medical author, hurried over in this way. If to kill time be the ſole purpoſe of our reading, it matters not what the ſubject be. Some are conſtant readers, and greedily catch at every thing they meet, yet never learn any thing. There is a middle point, if we can find it, between theſe extremes; and this it is our buſineſs to ſearch after; but proper attention to what we read is undoubtedly neceſſary.

"ATTENTION," ſays the author lately quoted, "may be conſidered as contributing much to the genius of obſervation. "It is a lens, which being applied to the "different parts of an object, enables us to "remark other parts, which we ſhould not "diſtinguiſh without its aſſiſtance. The "more we exerciſe our attention, the more "ſhall we diſcover of every object. A botaniſt ſees in a plant more than other men "do. He obſerves in it what ought to be "ſeen; whereas they (*i. e.* the inattentive) "know nothing even of what they do ſee. "Our attention becomes more perfect by "the advantages we derive from a habit of "obſerving." And this is as applicable in reading, as in obſerving the phænomena in nature.

BUT another caution will be equally neceſſary, not to take every thing for fact of which books inform us; nor ever to ſuffer ourſelves to be led away by great names. The greateſt men have committed overſights—

ſights—errors. Let us call to our aid both our judgement, our experience; and as often as in our power, the judgement and experience of thoſe friends, from whom we may expect aſſiſtance. If we follow not this plan, books may prove to us as the poet has deſcribed them, when he tells us they

——Are not ſeldom taliſman's, and ſpells,
By which the magic art of ſhrewder wits
Holds an unthinking multitude enthrall'd.
Some to the faſcination of a name
Surrender judgement, hood-wink'd. Some the ſtile
Infatuates, and thro' labyrinths and wilds
Of error leads them by a tune entranc'd.
While ſloth ſeduces more, too weak to bear
The inſupportable fatigue of thought,
And ſwallow, therefore, without pauſe or choice,
The total griſt unſifted, huſks and all.*—

The choice of authors is a material circumſtance. Time is precious; is ſhort; and ſhould not be waſted wantonly. Durſt I pretend to offer advice in an affair of ſuch importance, it would be to caution thoſe

* Cooper ut ſupra.

young in the profeſſion againſt engaging with too great a variety of books at once. A few ſyſtematic authors ſhould be firſt well underſtood, as they give a general view of the ſcience. After this, they may with leſs danger of being led aſtray, deſcend to thoſe who have treated on particular diſeaſes.—This may perhaps be ſaid to apply to a college plan of education, more than to a regimental ſurgeon's. We ſtill hope he has received the elements of his medical education in ſome eſtabliſhed ſeminary of this kind.

OPPORTUNITIES of this nature will furniſh him with a foundation to proceed on. It will likewiſe enable him to ſelect what is uſeful from what is trifling; and aſſiſt him in ſeparating what may more properly belong to him in his ſituation of an army ſurgeon, from what is foreign to his way of life. He will then be in much leſs danger of ſwallowing

——" Without pauſe, or choice,
" The total griſt unſifted, huſks, and all."—

IN

" In order to make obſervations himſelf, it will be neceſſary for him to have fixed principles to build upon. He will be capable of diſtinguiſhing diſeaſes only in proportion as he is previouſly acquainted with their hiſtory. Hence the utility and neceſſity of reading."

" A PHYSICIAN, who ventures to approach the bedſide of a patient," (and we may apply the obſervation to an army ſurgeon, who fills the place of a phyſician) " without this previous hiſtorical knowledge, can be conſidered only as an uſeleſs and idle ſpectator.

" HAPPY is the patient whoſe phyſician, with ſuch limited knowledge, is ſufficiently timid, and diffident to remain altogether inactive.

" MAY it not be aſked, whether Sydenham himſelf did not loſe many patients, from not having derived from the writings of

of others, by an extenſive reading, many parts of knowledge, which he could acquire only by infinite care and induſtry."

"A PHYSICIAN who has not read will be expoſed conſtantly to fear and uncertainty. His obſervations will be confined within a very narrow circle."

"IT is well known how much time is neceſſary for the perfection of any art; whereas reading furniſhes us in a very ſhort time with the diſcoveries of all ages. A ſingle moment is ſufficient to inform us of a great many truths, which were purchaſed by the care and trouble of years."

"A THOUSAND phyſicians, ſaid Rhazes, have laboured for a thouſand years paſt for the improvement of phyſic, and it is by carefully reading their works, that a man will inform himſelf of more things during a very ſhort life, than he would by running from patient to patient, during a thouſand years." "READ-

" READING makes us familiar with the methods of every time, and every country."

" A MAN of genius ſoon perceives the modification he is to adopt, when he is about to put the precepts of others in practice."

A REGIMENTAL practitioner cannot carry a large library about with him, from place to place, from country to country, where his unſettled life leads him. The few books therefore he ſhould peruſe, ought to be principal ones, *i. e.* partly ſyſtematic, and partly ſuch as treat on ſeparate diſeaſes. Every one ſhould poſſeſs an outline, a general notion of all the diſeaſes incident to the human body. Here Cullen's outlines, now perhaps the beſt as well as moſt faſhionable, may be recommended.—After this, ſuch authors ſhould be had, as have treated of the diſeaſes moſt incident to troops.

THE

The ſcurvy is chiefly obſerved at ſea, and in long voyages; but it is by no means always confined to mariners. We meet with many inſtances of it among ſoldiers. In garriſons, army ſurgeons will meet it. It raged violently in Minorca, during the late war, and was one of the means of enabling our enemies to ſubdue the iſland. And in the war previous to this it raged with conſiderable violence likewiſe among the priſoners at Wincheſter in England.

Lynd has written ſucceſsfully on this diſeaſe. His opportunities of ſeeing it were great, his judgement clear, and his obſervations are always important.* His treatiſe likewiſe on Hot Climates is an uſeful work. Pringle, who ſpent many years of his life in camps, and among ſoldiers, has likewiſe left practitioners in the ſame line a moſt valuable

* We acknowledge others have treated of it ſince him, but perhaps not with more ſucceſs.

valuable book. Here the ſurgeon will find information on almoſt every diſeaſe that will occur to him in the army. Monro alſo had good opportunities, and did not let them paſs unnoticed. His book on the diſeaſes of the army is an uſeful performance. The ſame author wrote on Dropſy, another diſeaſe that regimental ſurgeons will occaſionally meet.

Dysentery has been long noted for raging in camps. Many things indeed concur in the army to give riſe to it; particularly if troops be placed for any length of time in a moiſt, damp ſituation. The celebrated Zimmerman has treated this diſeaſe with much perſpicuity and judgement. Theſe, and ſome others, profeſſedly on ſuch diſeaſes as he has reaſon to expect among the privates, muſt form part of his library.

Cullen's Noſology, notwithſtanding what ſome may have thrown out againſt works of this nature, in my opinion, he will

will find much aſſiſtance from. Here is not only an arrangement, but, what is of more material conſequence, the principal ſymptoms of all diſeaſes. I muſt not omit Le Roy on Prognoſtics in acute diſeaſes. It ſeems to be an uſeful performance.

The venereal diſeaſe is ſo univerſal in the army, that it would be unpardonable not to have ſome of the beſt treatiſes on it. But the authors that have written here are ſo numerous, that it becomes no eaſy taſk to make a choice. Almoſt all of them differ; and almoſt all of them profeſs to differ from their experience of the futility of the methods of their predeceſſors. Such as have written within the laſt twenty years on it, have, however, treated it moſt rationally. Among theſe are Simmons, Andreè, Sweidiar, and ſome others; but I ſhall leave the choice to his own judgement.

The ingenious and indefatigable Mr. Hunter has lately given us a large and ſyſtemati

tematic work on it, from which, notwithſtanding the criticiſms it has underwent, he may perhaps find more aſſiſtance than from moſt authors on the ſubject.

Sore legs will often be met with in the army. He muſt therefore poſſeſs ſome books that treat profeſſedly on ulcers of theſe. Bell, Rowley, and Underwood, are the lateſt, and I believe the beſt on the ſubject. From the frequent colds to which ſoldiers are expoſed, it is no wonder we find catarrhal affections ſo numerous among them. Mudge has written the beſt on the ſubject. Not only from the nature of a ſoldier's life, but from ill treated catarrhs, we as often meet with phthiſis pulmonalis. To ſoldiers in Britain, the changeable nature of the climate makes this complaint ſtill more frequent. We muſt not omit ſome treatiſes then on this malady. Among many others, Reid and Foart-Simmons have written on the ſubject, and both with ſucceſs. Both Small-pox and Meaſles are to be met with

in regimental practice, and treatiſes on theſe he likewiſe ſhould poſſeſs.

He muſt not omit a treatiſe on Anatomy, particularly as diſſections have been recommended, to brighten up his memory, or to refer to occaſionally. Some anatomical plates will likewiſe be neceſſary. Cheſelden's Anatomy, as he is not to enter into the minutiæ, may perhaps anſwer. It has ſome uſeful plates; and to theſe may be added, Innes's Tables, or Albinus's, reduced by Bell, an engraver in Edinburgh. Winſlow's Anatomy is the moſt correct, and if he has room he may provide himſelf with it.

The diſcovery of the abſorbent ſyſtem, one of the greateſt ſince that of the circulation of the blood, and not leſs important, or leſs general, in the animal œconomy, has opened a field which the medical practitioner ought not to omit cultivating. By underſtanding the ſituation of theſe veſſels, in the human body, as far as they are yet demon-

demonſtrated, he will be the better enabled on many occaſions, to obviate diſeaſe, or remove it when preſent. The beſt work on this ſubject is that lately publiſhed by Mr. Crookſhanks.

He ſhould next provide a few books on Chymiſtry: Beaume's Manual, or ſome ſuch. If he can find conveniency to carry the Chymical Dictionary of Maquier, ſo much the better, as alſo his Elements. A great variety of celebrated works might be recommended on this uſeful, as well as beautiful ſtudy; but he muſt content himſelf with a few, from the nature of his ſituation, which forbids a large collection. Nor muſt he omit ſome on the Materia Medica. Alſton's and Cullen's are good performances. Among the Diſpenſaries, he may purchaſe Lewes's, the Edinburgh laſt edition, Berkenhaut's, and the London, a new edition of which is daily expected.

To refreſh his memory, he ſhould have ſome author on general phyſiology. Perhaps

haps Hallers, I mean the ſmall edition by Cullen, will ſuffice; and to this, if poſſible, let him add Morgagni on the Cauſes and Seats of Diſeaſes; it is a moſt uſeful collection. In Dr. Cullen's firſt lines, he will find an excellent account of fevers; but for more particulars, he muſt have recourſe to authors, who have made this their ſole ſubject.

Clarke's Treatiſe on Fevers, among many others that might be mentioned, is, I think, a good performance. Could he find room to carry Van Swieten's Commentaries on Boerhave's Aphoriſms with him, he may occaſionally reap much advantage from peruſing it on almoſt every diſeaſe to which the human body is ſubject. Here again I muſt leave his own judgement to decide.

Warner has written on the Eye. Ware on Ophthalmia; both which are good performances.

It will be ſaid, why ſúch a number of books, that comprehend more a courſe of ſtudy adapted for a phyſician than a ſurgeon? This is the very reaſon I recommend them: we all know regimental practice partakes more of the phyſician's than the ſurgeon's province. It is on this very idea I have all along proceeded. We oftener meet with fevers, and other contagious and epidemic diſeaſes among ſoldiers, than ſuch only as need external treatment, and the hand of the operative ſurgeon.

Beſides theſe, which I call more neceſſary, he may purchaſe others as he ſees occaſion. This will form a little, but uſeful library, which it ſhould be the care of the Colonel to order to be carried with the baggage, as punctually as he would the colours of the regiment.

With regard to books on operative ſurgery, perhaps Heiſter's and Bell's are the beſt ſyſtematical works as well as enough.

Sharp's

Sharp's Operations as far as they go, are allowed to be accurate: Wiſeman's Surgery is a good book: the moſt uſeful of Pott's works ſhould not be omitted: the whole would make a good addition to his military library, if he finds he can remove them eaſily with him on marches. Alanſon has lately written a treatiſe on Amputation; but to take notice of all the authors that may deſerve his attention would lead us too far.

Since ruptures are a diſeaſe which will not admit of thoſe afflicted with it to be continued in the army, as the conſtant exerciſe their duty calls on them to perform, muſt inevitably obviate their cure, and render them always liable to inſurmountable difficulties, I need not recommend books on the ſubject. Both Bell in his ſyſtem, and Pott have however, treated fully on them which may be conſulted as convenience ſerves. It is undoubtedly proper that a regimental ſurgeon ſhould be acquainted with the treatment of every diſeaſe which ſurgery comprehends;

comprehends; but it may not be practicable for him to convey from place to place all the books he might otherwiſe think neceſſary on theſe ſubjects. He muſt therefore content himſelf with a few, but theſe few, as we have ſaid, ſhould be well choſen; and the choice in a great meaſure muſt be left to himſelf.

THERE are many treatiſes on particular ſubjects in ſurgery, ſome of which he may add to his collection, if it be convenient, and his portable library be not already too much ſwelled. Among theſe I may mention O'Halleron on Gangrene; Deaſe on Wounds of the Head; and Ranby on Gun-ſhot Wounds; tho' it will be ſeldom in all probability, that caſes of this laſt mentioned kind will occur, notwithſtanding he practiſes in the army; becauſe battles very rarely happen. Yet this will be no reaſon for his entire neglect of the ſubject; for ſhould only one gun-ſhot wound occur in twenty years, he ought not to be ignorant of the method of treatment. SINCE

SINCE the ſoldiers will frequently call him to viſit their wives, which charity, we hope, will induce him to do: and ſince much of his attendance among them will be with child-bed women, he muſt not omit ſome practical treatiſes on midwifery. Smellie's Treatiſe in the octavo edition, may be conveniently carried, to which ſhould be added his plates reduced, to anſwer this edition, and ſold by Elliot of Edinburgh.

HE may likewiſe provide himſelf with Hamilton's Treatiſe on the ſame ſubject. Mr. White of Mancheſter, has written an uſeful treatiſe on the diſeaſes incident to lying-in women, which he ſhould not omit. And lately the ſame author has obliged the world with a ſmall tract on the ſwelling of the legs, ſo often the conſequence of child-bearing. Tho' the women of a regiment are not often ſubject to complaints after child-birth, yet not only this complaint happens among them, but one of a much more dreadful nature; I mean the puerperal fever.

fever. Caſes of difficult labour take place ſometimes even here, which reduce their ſtrength, and render them more obnoxious to thoſe diſeaſes that are the conſequences of weakneſſes.

On the puerperal fever, Leak, Hulme, Fothergill, and others have written; he may chuſe which he thinks beſt: the laſt mentioned author is the lateſt, and he aſſerts, that a cure is at laſt found out for this fatal diſeaſe, from which hitherto ſcarcely ever a woman recovered. It ſeems M. Doulcet, from much practice in the Hotel Dieu in Paris, found that it yielded to gentle vomits often repeated. With reſpect to the ſeat of this diſeaſe, authors are greatly divided: ſome aſſert that the inteſtines and Omentum are the ſeat of the affection, which they ſay ariſes from an inflammation induced on theſe parts from the preſſure of the womb in the laſt months of geſtation. But I have heard a celebrated anatomiſt in London declare that he has diſſected many who died of it,

yet never found an inſtance of inflammation in the Omentum, while he as conſtantly obſerved it to a great degree in every part of the pelvis.

All poſſible care ſhould be taken to avoid the attack of ſo formidable an enemy to the fair ſex. More can be done as a prophylactic than as a cure when once the diſeaſe is fully formed. For tho' the above medicine ſeems to be held out to the public on good authority and much experience, yet it were ſtill better if the patient was prevented from the danger of an attack. All the expence theſe few authors on the obſtetric art will ſtand the ſurgeon, will be repaid by the pleaſing reflection that he has contributed in every ſituation in which he has been placed, as far as in his power, to the general good of his fellow creatures. For with Seneca we ſhould ſay, "Non ut diu vivas curandum eſt, ſed ut ſatis.—Quid illum octoginta anni juvant per inertiam exacti? Non vixit iſte, ſed in vita moratus eſt."

Soldiers

Soldiers wives ſhould be looked on as the uſeful poor of the regiment, and ought to be conſidered in this ſociety as other poor are in other ſocieties. They ſhould be aſſiſted, and their uſefulneſs promoted; for they are equally allied to the army, as other poor are to their reſpective ſocieties, and therefore ought equally to be taken care of. They bring up many uſeful ſoldiers for his Majeſty's ſervice, which is ſtill a farther reaſon not to allow them to be neglected. If the ſurgeon gives them his aſſiſtance in their ſickneſs, it is as much as can be expected on his part. Any other charitable donations they may from time to time ſtand in need of, ſhould come from a voluntary contribution among the corps. I can by no means conſider them as the leaſt uſeful part of the army; and ſurely our care of them ought to be in proportion: but this ſubject I have treated of elſewhere.*

* Vid. Thoughts ſubmitted to Officers, relative to a regimental fund for the ſick wives of the ſoldiery.

I AM perſuaded that ſome attention of this kind would be the means of more marriages, and leſs uncleanlineſs in the ranks. It appears ſomewhat ſtrange that ſoldiers wives and widows (I do not mean officers) have never been thought worthy the notice of government. Might not ſome ſcheme uſeful to his Majeſty's ſervice as well as eelymoſinary be formed in favour of the women of the different regiments? Premiums might be granted to the mothers of legitimate children, whoſe ſons were born in the army and entered into the ſervice, over and above the common bounty. I offer this only as a hint to be improved on by ſuch as may have it more in their power. I believe it would encourage population; which in the army, in proportion to numbers, comes far ſhort of what it is in other ſituations, and among other claſſes of men. For promiſcuous commerce with proſtitutes, ſo frequent among ſoldiers, prevents it.

DENMAN

DENMAN has written on difficult Labours, and uterine Hæmorrhages; on the laſt we have alſo a good treatiſe by Rigby. They are both books of ſmall price, and contain uſeful information.

SINCE electricity has been recommended, ſome books on this ſubject muſt alſo be added to the ſurgeon's collection. Among ſo many treatiſes on it, we are at a loſs what to ſelect. The plaineſt and moſt eaſily comprehended is however the fitteſt for regimental uſe. Tho' if the ſurgeon has been liberally educated, this ſubject will be familiar to him. Among the many books of this kind extant, perhaps that by Cavallo is as plain and ſimple as any. I believe Adams is however the lateſt on the ſubject. This then, with the ſame author's Medical Electricity, and Prieſtly's hiſtory of the ſubject, may ſuffice. Perhaps the laſt may be diſpenſed with; but if he wiſhes to ſee the progreſs of the ſubject from its firſt diſcovery, this will afford him ample information and ſatisfaction.

To

To his medical library he will ſtill find advantage in adding periodical publications. Dr. Duncan's Commentaries, and the London Medical Journal ſtand at the head of theſe in Britain. If it was only for the account of new books, they would afford him ſatisfaction: but they go farther, and admit many uſeful papers, and hints not to be met with elſewhere. In a word, they are an uſeful medical and philoſophical newſpaper, communicating the earlieſt information of the labours of the learned in all parts of the world.

With reſpect to books on mineral waters, theſe may be the leſs uſeful, as ſoldiers can never have the advantage of this medicine, except in the form of fixable air, as already mentioned. But tho' mineral waters be never preſcribed by regimental ſurgeons to the privates, they ſometimes are to the officers: and ſince his advice may be aſked concerning their uſe, it is altogether proper he ſhould make himſelf acquainted with

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the nature of the moſt noted of the mineral ſprings. Officers are often afflicted with chronic diſeaſes from the changes of climate and other viciſſitudes their way of life has ſubjected them to. His knowledge in chymiſtry will apply uſefully here, and enable him to ſolve ſuch queſtions relative to their nature, and probable utility in theſe reſpective caſes of the officers; and he will beſides be able to adviſe which of the watering places to prefer; but the quantity to be taken, and other minutiæ muſt be left to ſome doctor on the ſpot. Williams has written on the waters of the German Spa; Home on the Dunze; Falconer on the waters of Bath; and ſeveral other authors on the other moſt noted waters: but as a vade mecum, wherein will be found a ſummary account of moſt of the beſt mineral waters of this ſort in Europe, Elliot's treatiſe on them may deſerve a place in his military library.

From an acquaintance with botany, the regimental ſurgeon will find more amuſe-

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ment than uſe; but in this light it deſerves to be cultivated:—Suppoſe this was the ſole advantage to be derived from it, the amuſement is rational, and one of thoſe that will impreſs his mind with a ſtill higher idea of the wiſdom of the Creator. This will appear to him from the great link the vegetable kingdom forms in the chain of created things; the variety and wonderful ſtructure of each individual plant; the various uſes it ſerves, whether in the different arts, or in food and medicine; or whether as a purifier of the atmoſphere that ſurrounds us, which is ſo neceſſary for the maintenance of life. This is every moment rendered more impure by animated nature; and without being ſtrained and differently modified in the minute veſſels of vegetables, it muſt in a ſhort time deſtroy "whatever breathes the breath of life." It is ſurely more rational for a man of ſcience thus to amuſe himſelf in his hours of vacation, in his walks of pleaſure, than either angling, fowling, or hunting; tho' exerciſes that are not only pardonable, but perhaps

haps praiſe-worthy in the officer, ſince they brace his nerves, and keep him from idleneſs and criminal diſſipation: but the ſurgeon's duty ranges in a very different ſphere, and in him therefore ſuch amuſements are leſs allowable. "Whatever buſies the mind" ſays the Rambler, "without corrupting it, has at leaſt this uſe, that it reſcues the day from idleneſs; and he that is never idle will not often be vicious."

While I remained in the ſervice this ſtudy was one of my chief amuſements, and one alſo from which I found much pleaſure, and ſome advantage. By this means I never regretted the want of acquaintances, tho' often among ſtrangers. Had I been incapable of finding entertainment from this ſource, I muſt either have often remained alone, or conſtantly ſought the ſociety of officers; the bad effects of a regimental practitioner's ſpending too much of his time among them, leſt it ſhould alienate his mind from

from his proper employment, I have already pointed out.

A FEW books, with a very ſimple apparatus, are ſufficient here. Linnæus's Syſtema Vegetabilium, and if convenient his Spec. Plantar. with ſome eaſy author on the elements of the ſcience, ſuch as Roſe, or Lee's Introduction, will almoſt be ſufficient. He may add a Tranſlation of Linn. Syſtem. &c. by the Botanical Society at Litchfield, if he chuſes; as alſo Lightfoot's Performance, and Hudſon's Flor. Anglica, both deſcribing the plants of Great Britain. The ſole apparatus that is neceſſary is a ſmall knife, a ſingle lens, and a glover's needle for the purpoſe of diſſection, and examining the ſtructure of the fructification.

DURING the time he remains in Great Britain or Ireland, as he is the more immediately concerned in the plants of thoſe iſlands, he will find the two books that have particularly treated of them moſt uſeful. I omit

omit mentioning others on botany for the ſame reaſon I omitted many in the other ſciences.

The opportunities a regimental ſurgeon poſſeſſes of viſiting, and remaining for ſome length of time in a variety of places and climates, renders it ſtill a fund of greater entertainment and pleaſure to him. We find few places ſituated at any great diſtance from one another, that will not afford ſome plant not common to both. The pleaſure of making any ſuch diſcoveries, will compenſate for the trouble (if it may be called ſuch) in ſearching for them; and ſince botany is now become ſo faſhionable a ſtudy, that the regimental ſurgeon can ſcarcely enter a town of any note, where he may not find ſome adept in it; in this way alone he will make reſpectable acquaintances, from which may reſult mutual improvement and entertainment to both parties.

It is altogether impoſſible he can make a Hortus ſiccus, he cannot convey a large bulk of

of dried plants from place to place; but he can make memorandums of the places where he has ſeen the more rare plants, or dry particular ſpecimens for his botanic friends in other parts of the kingdom, &c. which they will thankfully acknowledge.

It is unfortunate for the ſoldiery, that the regimental ſurgeons apply in general ſo little to books. I am ſenſible this reflection is unjuſt if applied indiſcriminately. Several eminent and induſtrious men are now in this ſituation,* and more have been during the late war whoſe ſervices are now ſuperceded by the peace.

In pointing out the foregoing authors, I do not mean to ſet up my judgement as a ſtandard for others; every one will in a great meaſure

* Among this number I muſt beg leave to mention Mr. M'Cauſland, of the 74th regiment; the gentleman I have no perſonal acquaintance with, but his ingenious paper in the 8th vol. of the Med. Comm. ſpeaks his merit.

meaſure be guided by his own taſte. I have omitted many, and thoſe perhaps ſuperior, and more pertinent to the ſituation of army ſurgeons than thoſe referred to; yet I am perſuaded he will find his account in poſſeſſing ſeveral of thoſe pointed out. But of whatever books his library conſiſts, they ought to be on uſeful ſubjects: and ſince he is limited in their number, the greater regard ſhould be had to their quality.

CHAP.

CHAP. X.

The Utility of cultivating the Acquaintance of Medical Men in the different Quarters; and the Study of the Nature of the Soil, and Qualities of the Water in each, recommended.

THE more we converſe on ſubjects of our profeſſion, the better, as we may reaſonably conclude, will we be inſtructed therein. It is ſo in every mechanical branch; and it muſt alſo be the ſame in a ſcientific profeſſion. A mechanic keeps company with men of the ſame craft, they talk on ſubjects relative to their buſineſs; of different mechanical movements, &c. and new thoughts may occaſionally occur, and improvements be reciprocally ſuggeſted. The merchant attends 'Change, and converſes with

with his brother merchant on the prices of the different commodities they wiſh either to purchaſe or to vend, and thus information circulates: for according to Ovid,

> Congenial paſſions, ſouls together bind,
> And every calling mingles with its kind;
> Soldier unites with ſoldier, ſwain with ſwain;
> The mariner with him that roves the main*.
>
> F. Lewis.

As far however as my knowledge reaches this is far from the caſe in regimental practice. 'Tis true that in the ſociety to which the regimental ſurgeons more immediately belong, there are not perſons of their own profeſſion among whom they might aſſociate. It is not always they meet other regimental ſurgeons. This confines their converſation almoſt conſtantly to the officers of the

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* Scilicet ingeniis aliqua eſt concordia junctis,
Et ſervat ſtudii fœdera quiſque ſui
Ruſticus Agricolam, miles fera bella gerentem,
Rectorem dubiæ navita puppis amat.

Ovid.

the corps to which they belong. But they ſhould conſider that this is not a place where they can introduce medical ſubjects. If at a time an officer turns the diſcourſe to phyſick, the ſurgeon muſt give the ſimpleſt, and moſt obvious anſwer to his queſtions; nor will the ſubject for the moſt part be ever introduced except on their own complaints. Officers would neither liſten to, nor indeed underſtand a more ſcientific detail; and to intrude ſuch converſation on the company at other times might be deemed, and I really believe would deſerve to be conſidered, not only as impolite, but pedantic. They are not intereſted in ſuch ſubjects, and therefore have no deſire to liſten to medical diſcuſſions. What is it to a man whoſe profeſſion is the ſword, to be told, that ſuch a complaint had ſuch an appearance; and that ſuch a medicine in a ſpecified quantity produce certain effects; and that particular improvements may reſult from it; and the like? If inſtead of this converſation he relates to the officer the different manœuvres

a body of men went thro' on any particular occaſion; how they behaved; in what form drawn up; whether they looked well, and were well clothed; whether they were well diſciplined; and other things of this nature with which they are more immediately acquainted, and connected, they will liſten to him with pleaſure, and thank him for his entertainment. This is natural; they are now acting in the way of their duty, enquiring after uſeful and entertaining anecdotes relative to it. Should not this be an example to the ſurgeon to purſue a ſimilar mode, and ſeek the converſation of thoſe of his own profeſſion? "With what ſatisfaction," ſays a learned author, "could the politician lay his ſchemes for the reformation of laws, or his compariſons of different forms of government before the chymiſt, who has never accuſtomed his thoughts to any other object than ſalt and ſulphur?"— "The higheſt and nobleſt enjoyment of familiar life, the communication of knowledge, and reciprocation of ſentiments muſt

always pre-ſuppoſe a diſpoſition to the ſame enquiry, and delight in the ſame diſcoveries."

If the ſurgeon is ambitious of no other company than of officers, he muſt undoubtedly loſe any taſte he poſſeſſed for medical ſubjects and converſation. When once this inclination, this propenſity for the company of men in the ſame line with himſelf is blunted, it will ſeldom be renewed: nay, in time the degeneracy may be ſo great, that he will feel as aukwardly in the company of medical people, when chance brings him into it, as at firſt he did among the military; and for the ſame reaſon; their converſation will be different from that which he has now been long accuſtomed to. In this caſe we may apply the words of an eminent author on the ſubject of proper aſſociates for medical men. "It will be right," ſays he, "To avoid the being too often with men of weak heads," (it is not meant to apply this to officers) "the too frequent converſation of theſe

theſe people ſometimes brings us down to a level with them, when we are the leaſt aware of it. By thinking with them we inſenſibly accuſtom ourſelves to think as they do.—A bad taſte once become familiar, ſoon becomes the only one we have." Retirement then on many occaſions is a thouſand times preferable to company where he is ſo liable to alienate his mind from ſubjects wherein he is ſo intimately concerned. Retirement in preference he ought undoubtedly to chuſe. Retirement is no bondage to a man of a contemplative turn of mind: on the contrary, it is agreeable. Moſt men at particular times ſeek retirement, and are happieſt when alone. A man really enjoys ſociety the better for being ſometimes abſent from it. He is ſurely to be pitied who muſt depend always on others for his happineſs, or entertainment. Happineſs is enjoyed to the greateſt perfection, where the chief ſource of it centres in a man's own breaſt. I have already pointed out a way in which he may occupy part of his leiſure hours; yet

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there is no need of continually flying from the company of the corps: it is enough if it be only moderately ſought; if he divides his time properly between their company, and the company of himſelf. It was on this plea I ventured it as my opinion in a former part of theſe remarks, that the ſurgeon ought not to dine conſtantly at the Meſs.

How many young men have made early ſhipwreck of their underſtandings on this very point? An early introduction into company, where the paſſions find no controul and the bias to diſſipation, inſtead of being reſtrained is encouraged, has ſoon blunted the edge of acuteneſs, and left either a rake, a ſot, or a glutton, where nature had planted genius and education; and foſtered wiſdom and penetration. For as an eminent author juſtly ſays, "Long intervals of pleaſure diſſipate attention, and weaken conſtancy: nor is it eaſy for him that has ſunk from diligence into ſloth to rouſe

rouſe out of his lethargy, to recollect his notions, rekindle his curioſity, and engage with his former ardour in the toils of ſtudy."

This leads me to the recommendation of the company of medical gentlemen to regimental ſurgeons in the different towns where they are quartered. Here they may be both entertained and improved; at leaſt their converſation will lean towards topics, which in a great meaſure relate to their proper line of life. Caſes of patients will be related, queſtions in medicine ſtarted, from the diſcuſſion of which, both parties may be gainers, and ſome little addition made to the ſtock of their knowledge. This ſtrengthens the mind, and confirms, (if I may be allowed the expreſſion) the habit of well doing. "It is, ſays an ingenious author, "By right and regular exerciſe, that our intellectual, as well as corporeal endowments, in general, acquire any ſort of readi-

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* Letters concerning Education to a Gentleman entering the Univerſity. p. 146.

neſs and activity.—Or, as Lord Verulam expreſſes it, [ſpeaking of logic] "Non ſolum dirigunt, eam (Scil. mentem) ſed et roborant; ſicut Sagittandi uſus et habitus non tantum facit, ut melius quis collimet, ſed ut arcum tendat fortiorem*.

EXPERIENCE has taught me the utility of what I here recommend. During the time I ſerved in the army, my firſt care on coming into new quarters always was, to enquire into the characters of the medical gentlemen of the place, and in what eſtimation their profeſſional abilities were held. I ſoon after found means of introduction to ſuch as I underſtood to be moſt eminent in their buſineſs, and moſt eſteemed in the town. This indeed proved one of my greateſt ſources of happineſs during my ſervice. In this way I formed ſeveral connections that I ſhall ever reflect on with pleaſure, and whoſe acquaintance will ever do me honour. Here I had a farther advantage; a compariſon of the

* De Augment. Scient. v. i.

the ſituation, diſeaſes, and healthineſs of a variety of places with one another.

And ſince I have touched on this ſubject, allow me to add, that a regimental ſurgeon ſhould make this his firſt and peculiar care on change of quarters. This is a matter of no little moment to him, as he will not now be taken by ſurprize, when the diſeaſes incident to the place, or then epidemic in it, appear among the ſoldiers. He has received, we ſhall ſuppoſe, ſuch information from the practioners ſettled there, as may in ſome meaſure enable him to obviate part of the evil impending; while he adopts thoſe remedies, when it does appear, which their experience have taught them to be moſt ſucceſsful in ſimilar circumſtances, or he improves them by his own ſagacity. This is material information, and perhaps may ſave the lives of ſome of his patients.

Here he muſt alſo remember that places at no great diſtance from one another may differ greatly in reſpect to healthineſs. One may

may not only be ſubject to more frequent diſeaſe than the other, but alſo to ſome particular one, which may properly be called the endemic of the place. I have known this fact in places at no greater diſtance than two miles and a half; nay half a mile, and it may be even leſs; however incredible it may appear to perſons unacquainted with ſuch ſituations.

The diſtance between the villages of Wheathamſtead*, and Harpenden is only two miles and a half. The latter is on a much drier foundation, as well as a more elevated ſituation than the former; and as experience ſhows, much leſs ſubject to intermittents, the fever of the ſoil. Wheathamſtead is built on a very low ground, in a ſort of dell; and thro' it runs a ſmall river whoſe banks, for many miles, are ſo flat that the water overflows them, and in wet weather forms a marſh ſpreading conſiderably

* Bedfordſhire, and the borders of Hertfordſhire.

ſiderably on both ſides. It is thick ſurrounded with wood to a great diſtance round, as is the whole country. Not only intermittents are more frequent here than at Harpenden, tho' ſo contiguous, but likewiſe putrid diſeaſes; and when they appear they rage with ſeverity. There is indeed ſcarcely a town of any extent to which the ſame remark will not apply; and in the ſpace of leſs than half a mile we will often find one part of a town, or even ſtreet more ſubject to ſickneſs and certain diſeaſes than another. Soldiers are very much confined to a particular ſpot: if they be found more than a mile from their billets, without a paſs, they are liable to be taken up for deſerters. Their confinement may render them more ſubject to the endemic, as well as epidemic of the place.

During the ſpring 1782, I had an opportunity of ſeeing this remark concerning the different degrees of healthfulneſs of contiguous places verified. A putrid fever

and ſore throat took place in Wheathamſtead, and exerted its violence chiefly among puerile and infantile ſubjects; tho' ſome few adults were likewiſe ſufferers. When it proved fatal, it was generally in a few days. The uncommon wetneſs of the ſeaſon joined to the natural moiſture that is retained in the ſoil here, where copious miasmata are always exhaling, laid the foundation of the diſeaſe.

No complaint of this kind appeared at Harpenden tho' the diſtance be only what we have mentioned; and from this known difference in the two places, there was little reaſon to apprehend it. A ſurgeon at Luton, which is about ſeven miles from it, who attended a patient ill of it there of about ſix years of age, whom I viſited with him, and who ſoon after died, agreed with me in opinion, that the reſt of the children of the family* ſhould be inſtantly removed to

* Son of the Rev. Mr. Wheldon, Rector of the pariſh, &c.

to this village, not doubting from the nature of the ſoil, but they would eſcape there. The event verified our opinion.

In like manner St. Albans and Luton are but ten miles aſunder; yet the latter is far more ſubject to intermittents than the former, becauſe it is alſo much ſhaded with wood, lies very low, and has the river abovementioned running thro' it, cauſing much ſtagnating water near its banks. The ſame may be ſaid of Redburn and St. Albans, which are only four miles and a half diſtant from each other.

Great Yarmouth in Norfolk, and the village of Gorleſtone in Suffolk, are only two miles diſtant, and in a ſtraight line acroſs the river ſcarcely one; yet there is conſiderable difference in the healthineſs of the two places. Yarmouth lies lower by many feet, and on a flat, once a ſand bank, ſtill preſerving its level form; and tho' the foundation is ſandy, and the ſwarth looſe

and

and light, the water lies at no great diſtance from the ſurface. This was proved from a well dug on the ſame level, on the oppoſite ſide of the river, below the beach on which Gorleſtone ſtands; and is farther proved from the ſeveral pieces of water that conſtantly ſtagnate round Yarmouth.

Besides, Gorleſtone is almoſt entirely free from thoſe fogs in which Yarmouth is ſo frequently envelloped I have ſeen a fog ſo thick cover the town from the ſea in a few minutes, as well as from the meſhes* on the weſt of it, that an object at twenty yards diſtance could ſcarcely be diſtinguiſhed; while a very great alteration at the ſame time took place in the heat of the átmoſphere. In an hour or two theſe would again diſappear, and the ſun ſhine forth. This viciſſitude of weather would perhaps be repeated once, twice, or oftener in the courſe of a day. The elevated ſituation of Gorleſtone

* On the weſt at ſome diſtance, are much ſwampy ground, called meſhes by the inhabitants; which I ſuppoſe is a corruption of Marſhes.

leſtone preſerves it from ſuch ſudden changes of atmoſphere. Gorleſtone is ſituated weſt of both ſea and river; Yarmouth between them. The piece of ground on which Yarmouth ſtands being by this means almoſt a peninſula. The river running parallel with the ſea for between two and three miles before it falls into it, forming a tongue of land not more than from a quarter to half a mile in its broadeſt part.

Two miles farther ſouth than Gorleſtone, on the common of Hopton, the ſoil is even more dry and light, with much Heath; the ſituation is alſo ſtill more elevated above the ſea, and the water at a conſiderable diſtance from the ſurface. This was proved by wells dug for the uſe of the camps formed there in 1781 and 1782. They were obliged to penetrate deep before they found water. The ſummer of 1782 was remarkably wet; yet no diſeaſes proceeding from moiſture or miaſmata took place among the troops. There was not a fever of any kind

kind during the encampment; nay even ſome affected with chronic complaints now recovered from them in a great meaſure. This was the caſe with an officer long labouring under an affection of the lungs.

THE ſame obſervation may be made reſpecting Loweſtoft, which is ſix miles ſouth from Hopton common, and along the ſame coaſt. It is likewiſe elevated conſiderably above the level of the ſea, and is not immediately ſurrounded with wood. There is a large lake ſouth weſt of the town, about two miles; but I have not found its exhalations produce any ſenſible effects on the health of the inhabitants. I ſpent eleven months along this coaſt from Loweſtoft to Yarmouth; and had time in this period to form ſome obſervations. The difference of theſe elevated ſituations, and the low ſituation of Yarmouth appeared ſtill farther by the greater number of ſick while the ſoldiers lay in it, than what was experienced on Hopton common the preceding ſummer.

THESE

These examples might ſuffice to ſhow, that places at ſmall diſtances may differ greatly in reſpect to healthineſs; but we ſhall add one more as a farther illuſtration. The city of Lincoln is partly built on a high hill, and partly in a low vale. This produces very great difference with reſpect to the ſoil and health of the inhabitants. Cloſe on the town is a large lake; and a little weſt, at the diſtance of a field reſembling meadow, marſhy and ſcarcely to be travelled unleſs in dry weather, is another ſtill larger, called Swan Pool. But in winter and in wet weather, the whole country round, almoſt as far as the eye can reach, is almoſt an univerſal lake. From the high to the low town it is little more than a quarter of a mile; for the mountain on which part of the town ſtands riſes abruptly. Yet the difference is ſo great, that it is cuſtomary for the medical gentlemen there to ſend their patients from the low to the high part for their recovery. The endemics of the place, *i. e.* intermittents, and remittents, are both

more

more frequent, and more obſtinate in the low than in the high town. This has been long obſerved by the faculty there. And on this obſervation being made to the commanding officer when I lay in it, he very prudently improved by the hint, and ordered a frequent change of quarters among the privates, from the high to the low town, and vice verſa, to prevent any diſeaſe that by a longer continuance in the marſhy part of the town the ſoldiers might be liable to contract.

I HAVE dwelt perhaps too long on this ſubject, and needleſsly multiplied my illuſtrations; but it was with the deſign of more ſtrongly enforcing the neceſſity of regimental ſurgeons application to the ſtudy of the ſoil in their different quarters; a ſpecies of knowledge more peculiarly proper for them, as the ſoldiers from their frequent change of quarters are more particularly ſubject to ſuffer from the effect of unhealthy ſituations. This knowledge, it is ſuperfluous to tell them

them, they will obtain ſpeedily from an acquaintance with the medical gentlemen of the place; tho' their own obſervation muſt unite, for the better conviction of the truth they receive; as a man can always rely more on the fidelity of his own obſervations than on others.

BEFORE I quit the ſubject, I ſhall juſt hint at another example, and yet perhaps one that is not ſo forcible as ſome of thoſe we have given. In Ipſwich, the capital of Suffolk, there is likewiſe a variety in the ſituation, tho' leſs than ſome of thoſe places already mentioned, which produces ſome variety in the healthineſs of its different parts. Corn-hill, St. Matthew's Street, and a few others in the vicinity of the market-place, being conſiderably more elevated than the eaſt and ſouth-eaſt parts of the town, have a freer circulation of air, and are leſs ſubject to intermittents and other fevers; which, tho' this is by no means a ſickly town, but rather the reverſe, fre-

quently attack the poor in the lower parts, namely in St. Clement's Street, the Common Quay ſtreet, the Upper and Lower Waſhes, as they are called, thoſe parts of St. Helen's contiguous, and the cloſe narrow ſtreets or lanes in ſeveral other parts of the town, of which there are a conſiderable number.

The water is remarkably pure in the higher parts, which may among other things, contribute ſomewhat to the leſs frequent appearance of diſeaſe there. From ſome late trials, and a compariſon made between it, and that which ſerves the lower parts, it is found remarkably purer.

St. Clement's Street runs alſo parallel to, and cloſe by the river Orwell, the ooze of which appears above the ſurface, and indeed the whole bed of the river, which is of conſiderable breadth, is left nearly dry for almoſt two miles in its extent, on every ebbing of the tide, except in its channel, conſiſting

ſiſting only of a ſmall winding ſtream in the middle, the ſhipping being left faſt in the mud till the return of the tide.

From this copious miasmata muſt be exhaled, which cannot fail to debilitate, and prediſpoſe the inhabitants near it to fevers of different types, more frequently than in the higher parts of the town, where theſe noxious effluvia ariſing from the ooze do not reach. Let any perſon walk along the banks of the river for ſome way during the abſence of the water, and the diſagreeable putrid ſmell from the mud will ſufficiently convince him, that the air around muſt be greatly tainted; yet the diſtance of the low part of the town from the higher, does not exceed half a mile.

The next thing a regimental ſurgeon ſhould have in view is the nature of the water in his new quarters: a great deal may depend in preſerving health, on the quality of this neceſſary article of life. Changes in the

the water may produce diſeaſes independent of other auxiliaries; and if he be not watchful in this reſpect, he may be conſiderably puzzled to find the cauſe, and to apply a cure.

When a regiment in which I ſerved ſome years, marched from Newcaſtle on Tyne to the barracks at Tynemouth, in June 1781, only nine miles diſtant, a diarrhœa appeared among the ſoldiers a few days after, which proved both troubleſome and obſtinate for ſome weeks. I attributed the cauſe, after ſome reflection, to the water of the place; and on adviſing them to be as ſparing as poſſible of its uſe in drinking, the complaint ſoon diſappeared. The water there is hard, and will not curdle ſoap, owing to the different mineral ſubſtances with which the neighbourhood abounds. The whole country for many miles round may be ſaid to conſiſt of pit-coal, and other minerals, ſuch as pyrites, wherein the vitriolic acid prevails much. While the regiment

ment remained in Newcaſtle, no complaint of this ſort appeared, tho' the water there is equally, if not more loaded with mineral particles. The reaſon ſeemed to be the uſe of ſmall beer, which the men received from the publicans on whom they were billeted. On going into barracks this allowance ceaſed, and they now were obliged to drink water where they drank beer before. This affected their bowels, partly from want of uſe in drinking it, and partly from the nature of the water itſelf.

On the ſucceeding February I was ſtill farther confirmed in the truth of this obſervation; for on the 26th regiment going into the barracks and relieving ours, the very ſame malady befel them. Mr. Millar, their ſurgeon, conſulted me on the occaſion, having been left behind in ſick quarters, and I gave it as my opinion, that the fault was in the water, and gave him at the ſame time, a relation of what had happened to my patients the preceding ſummer. Of courſe,

he

he very judiciouſly ordered his hoſpital to be ſupplied with milk; and cautioned the men to be ſparing in their uſe of water; but in ſo ſmall a village, it was impoſſible to procure milk for the whole regiment, tho' they were not above one third ſo ſtrong as ours.

THERE remains ſtill another reaſon why the regimental ſurgeon ſhould cultivate the acquaintance of medical people where he is quartered. From the great trouble and inconvenience there is in tranſporting a large library from place to place, he cannot be ſupplied with many books that would otherwiſe be neceſſary for him. His library muſt therefore be very circumſcribed, as already pointed out. For tho' he ſhould poſſeſs all the books we have mentioned as proper for his peruſal, yet they will form but a very contracted library, particularly for a man who wiſhes to paſs ſeveral of his hours daily in reading.

THE acquaintance and friendſhip of the ſettled practitioners will ſupply this defect. He

He will have the uſe of their libraries if his behaviour be ſuch as command civility, or deſerves their friendſhip: and they will be the readier to oblige him, as he does not come among them a rival in the profeſſion. He will find this of no ſmall advantage. The defect of his own ſcanty collection will in this manner be well ſupplied. There are few ſurgeons or phyſicians who are any time eſtabliſhed in a place that have not a conſiderable variety of books. Beſides, if there are any extenſive bookſellers in the place where he lies, he ſhould agree with them for leave to read, provided they have a good aſſortment of thoſe medical, philoſophical, and other works which he wiſhes to peruſe.

And moreover, as difficult caſes in practice will occaſionally occur, he can now have the advice and aſſiſtance of ſome of the medical gentlemen whoſe friendſhip he has procured. It is ſeldom a regimental ſurgeon is placed near other regimental ſurgeons to take their advice, ſuppoſing them well qualified

qualified to give it. He is always almoſt among ſettled practitioners: nor is this one of the leaſt reaſons why he ſhould form connections among the medical brethren of the place he reſides in.

To conclude, the more a medical man converſes with medical men, or men of ſcience, the more will be his opportunities of receiving information, and his emulation will be thereby kept alive. A regimental ſurgeon may have many ſuch opportunities, from the variety of places he goes to, which muſt always afford him a greater variety of ſuch aſſociates, provided he takes a proper method to be introduced, and is inquiſitive on ſuch ſubjects.

END OF THE FIRST VOLUME.

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WITH

OBSERVATIONS ON HIS GENERAL QUALIFICATIONS;

AND HINTS RELATIVE TO A

MORE RESPECTABLE PRACTICE,

AND

Better Regulation of that Department.

Wherein are interſperſed many Medical Anecdotes, and Subjects diſcuſſed, equally intereſting to every Practitioner.

By R. HAMILTON, M. D.

Of the Royal College of Phyſicians, London; Member of the Medical and Phyſical Societies of Edinburgh; and of the Medical Society of London.

IN TWO VOLUMES.

ATTAMEN ERRORES NON SUNT ARTIS, SED ARTIFICUM.—Newton.

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IN a ſhort proſpectus of this work publiſhed before it went to the preſs, to explain the Author's deſign, and his motive for publication to thoſe inclined to countenance it, he there mentioned his intention of compriſing it in *One Volume* Octavo, conſiſting of Seventeen Chapters, the contents of which were then laid before them. In the execution, however, of this plan, it was found neceſſary, as already ſet forth *, to divide it into *Two*, not only for the greater convenience of the reader, but the more perfect conſideration of the different ſubjects of which he was to treat; yet neither the *number* of Chapters nor their *arrangement* has been altered; this Volume, therefore, commences with Chapter *Eleventh*. The ſhort ſketch of the Influenza of 1782, which is added, it is hoped, will not be diſpleaſing to the young Military Medical Practitioner.

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* Vid. Advertiſement to Vol. I.

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CHAP. XI.

Surgeons diſſuaded from uſing Billets, and of the Propriety of keeping a Medical Regiſter.

THOUGH we took notice in a former Chapter of the danger of having the mind alienated from Medical Subjects by aſſociating with the Officers, nothing was ſaid relative to Billets, notwithſtanding they conduce in like manner to this end. In quarters theſe are allowed to the officers in common with the privates. To dwell always in public houſes is to dwell almoſt conſtantly in the midſt of noiſe, buſtle, and revelling. In ſuch places a man can never be alone, he is liable to interruption on every occaſion. It is true, this may happen, not

only oftener in one place than another; but the company he is expoſed to, in this manner, will be in ſome places more diſagreeable than in others, and more unfit for a perſon of genteel education to mingle with, if he could well avoid it.

In ſome towns it is cuſtomary for every gueſt of whatever rank, to meet in the ſame room. In a place where this cuſtom prevails he will ſoon find himſelf ſurrounded with a crowd, drinking, ſmoaking, (for this is the cuſtom in many ſuch inns in England) and converſing promiſcuouſly together; no perſon concerns himſelf with the employment of another, or refrains the more from indulging his own inclinations, the cuſtom of the place giving them this ſanction. Here the reader is not to ſuppoſe I am ſpeaking of a London Coffee-Houſe, where every gueſt may if he chuſes have a ſeparate box, and may either write or read at his eaſe, one perſon giving little diſturbance to another. It is a very different place I am deſcribing; it

it may be a ſmall room in a mean inn, where all ſit round the ſame table, nay the Cobler, and the Mayor of the Town together:* and where there may not be a place in the houſe proper to retire to on ſuch occaſions.

In this dilemma, to ſtudy, is impoſſible. It is, we ſhall ſuppoſe, the coldeſt ſeaſon of the year, and the weather even inclement for the ſeaſon. There is not a ſecond fire in the inn ſave in the kitchen, for it is a part of the kingdom, where fire becomes a material article in houſe-keeping. The Surgeon may indeed retire to his bed-chamber, but he will not be allowed a ſeparate fire, without paying ſixpence for what will be conſumed in two or three hours; or what is more common, there is no fire place in the bed-chamber. What then muſt he do? The alternatives are few; he muſt lay aſide his ſtudies; and, perhaps, for ſelf-defence, be compelled to call for liquor, and join in the

* I ſpeak from experience.

the noiſe to avoid ſingularity. To betake himſelf to head quarters, and the meſs-room will be as inconvenient with reſpect to ſtudy; there he will not be ſurrounded with leſs noiſe, though his company will now be more ſelect; if he chuſes neither of theſe, he has no where to fly, but to the kitchen. Sad alternative for a mind accuſtomed to different companions! Suppoſe he retires to his bed-chamber, and that there is a fire place in it; his ſmall pay cannot afford a fire at ſo enormous a rate. Suppoſe again he wiſhes to walk out, rather than remain among companions ſuch as we have mentioned: the weather is even too inclement to allow of this amuſemeut, and too cold to permit him to remain long in his chamber without a fire; nor will they ſuffer him to ſtay in the kitchen, were he even willing for a time to intermix with ſervants, but remind him, though politely indeed, that there is a fire in the *parlour*. In this a double purpoſe is ſerved. Firſt, they get rid of his incumbrance about the fire; ſecondly, by diſmiſſing

miſſing him to the *parlour*, there is the greater chance of his ſpending ſixpence in liquor. Beſides, as he is furniſhed by the houſe with a bed, which the law obliges them to give him, they always look on him as a nuiſance; did he expend all his ſubſiſtance in the houſe, it would not ſatisfy them; ſuch is the general diſlike inn-keepers ſhow to the military; indeed, it muſt be confeſſed they have ſome cauſe; for it is a ſevere tax on them: the ſubaltern officer ſuffers by it alſo, becauſe he is often poorly accommodated; and his pay will not afford him to hire lodgings: however, ſome may think this account exaggerated, I mention not only what I have experienced, but have alſo omitted circumſtances, that would make the account even leſs credible to perſons that have not felt the various inconveniences attending the life of a ſoldier. An officer of rank is both allowed better accommodations, and is likewiſe better enabled from his pay to make his ſituation comfortable; but one below the rank of a Captain, with only his

pay

pay to ſubſiſt him, muſt ſuffer many and great inconveniencies.

The Inns, it is acknowledged, are not however all of this deſcription Sometimes we find them extremely commodious. In ſome he will be allowed a room, fire and candle, but never with a good grace, or true good will; for the magiſtrate is frequently obliged to interfere in the officers behalf, who is compelled often to ſpend money in the houſe for no reaſon whatever, but to court the countenance of his hoſt. Nay, ſuppoſing the beſt; he is liable to many inconveniencies and interruptions. If a friend calls he treats him perhaps, or is treated; or if he endeavours to apologize, that he cannot drink; that liquor does not ſuit his preſent ſtate of health, ſtill his friend may perſiſt, alledging it may be of ſervice; perhaps, he will hint the refuſal proceeds from parſimony, an accuſation which his pride revolts at; and hence his compliance merely to weaken the force of the inſinuation. In this

manner

manner his money is expended, his time waſted, and his mind vitiated. Again, ſuppoſe the weather mild and favourable, ſo that the ſurgeon can retire to his chamber; his bedchamber is not entirely his own; if poſſible he will be put into a double bedded room; here either one of the officers ſhares it with him, or what is much worſe, it is every caſual paſſengers that pays for it. In both theſe ſituations his inconveniencies are great; his comrade will ſpend perhaps ſeveral hours a day in the room, during which it may be almoſt impracticable to purſue his ſtudies; for as his comrade's mind is engaged in different purſuits, he will think himſelf little intereſted in favouring the Doctor's deſigns.

PRIVATE lodgings then is by far preferable, but it is not in every town, where he can afford to engage them. The places they are moſt wanted in, are where a ſubaltern can leaſt afford them on his pay. Suppoſe, ſuch a place near London, as deſcribed above,

where fire is ſo expenſive, every neceſſary is dear in proportion. A very incommodious room may coſt him above ſix ſhillings a week, he has fire and candle to provide beſides, if he eats at a public houſe, a dinner of the moſt common food, and even then but ſcanty, ſtands him a ſhilling; which is denominated by them a *parliament dinner*; for there is a law, by which the landlord is obliged to give an officer his dinner for a ſhilling; but in theſe places one ſhilling and ſixpence is the common price; for the parliament dinner is held in a contemptuous light, and the conſequence often is, diſagreeable inſinuations from the landlord, and incivil ſneers from the attendants. Small beer at the leaſt is two pence. All this is to come from a guinea a week ſubſiſtance, beſides breakfaſt, clothes, ſhoes, and many other things which muſt occaſionally be purchaſed; can a ſubaltern, i. e. the Surgeon afford to hire a room? In the preſent ſtate of his pay, he cannot.

It were to be wiſhed therefore, that the regulations were ſuch, that the Surgeon ſhould be provided with private lodgings, in order to give him the better opportunity of purſuing his buſineſs, which is of ſo much importance to the corps. If he keeps a journal of every patient's caſe as he ought to do, it will oblige him to ſpend a conſiderable part of the day in writing, and it has already been ſhown how inconvenient, nay almoſt impoſſible this becomes in billets. Some may ſay, he ought to ſpend his time in his hoſpital; let this be his place of ſtudy; and then much of his complaints againſt bad billets, and inconvenient lodgings will ceaſe; but it ſhould be firſt enquired, whether he has an hoſpital; and what are its accommodations? It is probable he has none; for it is generally found alſo that in thoſe places where they are moſt needed, houſes for the accommodation of ſick Soldiers cannot be procured. But allowing there be an hoſpital; we have pointed out in a former part how incommodious they generally are.

To procure the Surgeon a room when the regiment is in quarters ſeems to be neceſſary; but how the expence is to be defrayed may not ſeem ſo obvious; the ſtock purſe we dare hardly mention; it would be hard to rob one officer to ſerve another; yet ſince government has made no proviſion here, ſome regimental ſcheme, we think, ſhould be thought of. The only one that ſeems practicable is to take the allowance of a ſhilling a day from the non-effective men; or in other words, let him be allowed to pay one of the companies, ſuch as can be agreed on among the corps. Each company has the pay of three privates allotted for the repair of arms and accoutrements; this is one ſhilling and ſixpence a-day. Let him have this for paying the company. This will give him little interruption; for one of the Serjeants will do the duty for a ſhilling, or even ſixpence a-week. He has only to ſettle his accounts with him once a-week, which will not occupy above half an hour: here will be nine ſhillings and ſixpence a-week at leaſt,

leaſt. It is true he runs a hazard; if a man deſerts in debt, he will be obliged to anſwer it to the Pay-maſter; alſo to repair what may be wanted in the arms of the company, ſince it is for this purpoſe the money is granted by Government; but, on an average, he may ſtill clear a crown, or ſix ſhillings a-week: this will afford him a room, fire, and candles. What is ſaid here is likewiſe meant of the Surgeon's-mate. The non-effective men of another company ſhould be allowed him. The good effects of ſuch a regulation, and encouragement, I am perſuaded, would ſoon appear, by his better attendance on his profeſſional duty. The ſatisfaction this muſt afford a Commanding Officer, of a humane diſpoſition, and the corps in general, will be a ſufficient recompence for the ſmall indulgence allowed him *.

It

* Since the peace was concluded, an alteration is made in the non-effective men; only two are allowed now to a regiment of eight companies, in place of three. This comes only to 18l. 5s. per annum: half at

It will be ſaid, the Surgeon's perquiſite, and ſaving from the medicine-money, puts it eaſily in his power to furniſh a private room; but we ſuppoſe the Commanding Officer has taken this out of his hands, and that he muſt ſubſiſt on his pay; for we ſhall afterwards endeavour to ſhew, that ſome regulation is neceſſary reſpecting the medicine-money. This, or ſome ſuch method, ſhould be put in practice, if the pay is to remain as it is at preſent. But another ſcheme ſhall afterwards be ſubmitted to the opinion of the public, which appears preferable.

When we conſider the value of a man to Government, a political and patriotic principle,

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at leaſt it will take to keep the arms and accoutrements in repair; the ſaving then cannot be above ſixpence a-day. As he may ſometimes be in barracks, this may almoſt be ſufficient at an average; but each Captain ought, for the ſake of their men, to add ſixpence a-week more: the ſame to the mate, if mates are to be continued.

principle, as well as humanity, ſhould influence our minds to procure every thing the army can afford for his welfare. The death of a private is a loſs to the nation, ſince he coſts conſiderably before he is fit to act as a ſoldier in the defence of his King and country: for, ſuppoſe, at the death of one man, another recruit could be immediately procured, he demands his bounty, which muſt come from the national purſe, independent of his pay, neceſſaries, and accoutrements. In times of war he is a double expence from an augmented bounty, and a double loſs, as men are then doubly neceſſary, and obtained with much difficulty. Every death muſt affect the ſervice, as it is a diminution of the national defence, and ſtrength; and ſurely it muſt ſo far affect the national purſe, as the expence thereby incurred amounts to. If this be allowed, and it appears undeniable, it points out the attention the ſoldiery deſerve in a political view; and, we hope, humanity will be ſufficient to enforce what politics demonſtrate

as

as neceſſary. Hence every degree of encouragement ſhould be given to the medical department, where ſo large a ſhare of the ſoldiers' welfare is placed.

"Succeſs in war," ſays Dr. Millar, "depends on preſerving military forces in health and vigour: diſarmed by ſickneſs, the moſt intrepid warriors become a prey to the moſt puſillanimous adverſary; the wealthieſt nations to thoſe of the feweſt reſources, and the ſtronger to the weaker power. Fleets and armies moulder away by diſeaſe: new levies do not ſupply the place of veterans trained to arms, and inured to martial atchievements.

YET this fundamental branch of the art of war hath not been cultivated: phyſicians only, it hath been ſuppoſed, can beſt judge of it; the moſt unſucceſsful hath been conſulted. The ſimple mathematics of ſhop arithmetic, as it is happily expreſſed by a celebrated political writer, might have corrected theſe ill-founded opinions, Stateſmen

men might have judged without profeſſional ſkill, and aſcertained the truth by numerical calculation. *."

SUPPOSE the medical department of a regiment is placed on the liberal plan we have proved to be neceſſary, the phyſician, or ſurgeon, that has the appointment, ſhould, on his part, enter into obligations, which the military laws ſhould take care were performed, and this under the penalty of ſevere puniſhment.

This leads me to mention a medical journal. It ſhould be conſidered as a neceſſary part of his duty, to keep a regular journal of every ſick man's caſe that enters his liſt, whoſe complaints are deemed of the leaſt ſerious nature; with a hiſtory of the ſymptoms, and the preſcriptions uſed. A copy of this might be given to the Colonel at ſtated regular periods, and by him, if

* Vid. Introd. to Diſ. of the Army in the late war.

if he thought proper, tranſmitted to the Phyſician and Surgeon-general for their inſpection, particularly ſuch caſes as terminated fatally, in order that they might judge, as far as the caſe ſtated allowed them, whether the Doctor had diſcharged his duty faithfully or otherwiſe: the medical and ſurgical caſes being tranſcribed into ſeparate books, ſhould each be ſent to the reſpective inſpectors; the medical to the Phyſician, the ſurgical to the Surgeon. The examination of theſe will, no doubt, be ſome additional trouble to the Phyſician and Surgeon-general; but we ſuppoſe their ſalaries are ſufficient to recompenſe them. There is no doubt, however, of their ready compliance with any ſcheme that has for its object the proſperity of the ſervice, and the health of ſo numerous a body of his Majeſty's ſervants. This would be ſomewhat ſimilar to the log-book of a ſhip, by which the Commander's conduct is checked under any ſuſpicions of miſbehaviour. It would certainly be a powerful reſtraint on

on inattention and indolence; and perhaps would be as great a means of reſtraining unqualified perſons from regimental practice, as any yet uſed. They would be now careful to avoid falling under the diſgrace, and cenſure of men of profeſſional abilities placed above them.

In carrying on this regiſter, the ſame plan ſhould be purſued as is adopted in other Hoſpitals. Firſt, the ſymptoms deſcribed; then the daily preſcriptions mentioned; and laſtly, an account of the operation of the medicine, with the changes the patient daily undergoes, whether for better or worſe, taking care to ſeparate the diſturbances created by the medicines themſelves*, which are exhibited, from ſuch

* "It ſeems certain, that medicines which do not "produce ſome good effect, are, if they are of any ac- "tivity, conſtantly more or leſs pernicious We "muſt therefore learn how to eſtimate the effects of "remedies, if we wiſh to avoid an erroneous applica- "tion of them, and to diſtinguiſh what ſhare they "may have in the *eſſential* or *accidental* ſymptoms of a "diſeaſe." Vid. Zimmerm. on Experience in Phyſic.

ſymptoms as truly ariſe from the nature of the diſeaſe (for a careful diſtinction ſhould be made here in giving an accurate hiſtory of what is going forward), and this continued till the caſe either ends fatally or favourably. The experience reaped from ſuch ſtrict obſervations, would add to the ſtock of the Surgeon's knowledge, while a deſire for honeſt reputation would quicken his diligence; and this, perhaps, equally as much as if his ſupport and continuance in the appointment depended ſolely on his ſucceſs.

If ſome plan of this nature be not entered into among regimental Surgeons themſelves, for their own improvement, or by an order from ſuperiors in the ſervice, they may go on in the ſame thoughtleſs routine, tread in the ſame beaten tract of bleeding, bliſtering, vomiting, and purging indiſcriminately from habit, more than reaſon, as we have ſometimes had occaſion to obſerve, without the trouble of reflection, whether it is likely to do good or harm, or may be proper or miſchievous.

To

To perſons of this thoughtleſs turn, no time is ſo tireſome as that ſpent in an examination of the ſick liſt; the patients names are called over, ſome inſignificant advice given; perhaps ordering the patients to procure ſomething, which the Surgeon ought not only to conſider they cannot afford from the ſmall pittance of their ſubſiſtence, but which, if its application be neceſſary, he ought to furniſh them with; then return to his amuſements, whether walking, fowling, fiſhing, hunting, or the like, till the hour of dinner approaches; while this and the jovial glaſs engages, perhaps, the greater part of the evening; morning comes, and the ſame ſcene is again acted; while the patients are but too often left to the ſtrength of their conſtitutions, and the operations of nature for a cure.

What I mean they ſhould furniſh, if it be neceſſary to preſcribe them, are, milk, vinegar, bread for poultices, oat-

meal,

meal, and oil. Theſe articles are often uſed in the regimental practice, and often with the greateſt propriety; yet ſeldom have I obſerved it to be at the Surgeon's expence. If a ſoldier, by ſome accident, meets with a bruiſe or ſprain on any part of his body, he is probably ſent away, with an advice to bathe it with vinegar. This treatment may be extremely proper; but as it may happen that none is given him, and he cannot afford to buy it, the advice is as ſeldom put in practice; thus the cure is frequently left to nature.

Bread and milk poultices are as often applied, with advantage, to various complaints. When this is the caſe, the patients in ſome regiments are obliged to furniſh both bread and milk. I have known this become a very heavy and oppreſſive tax on the ſoldier, in caſes where their application was neceſſary for any length of time; it may be two months and upwards. I have known them coſt him no leſs than three half-

halfpence a-day during the time they were uſed; and his remaining ſubſiſtence did not greatly exceed as much more: at the utmoſt, the remainder left was only about twopence halfpenny. For when a patient is ſent to the regimental hoſpital, half a crown a week is generally his allowance while he continues in it. This is put into the hands of the hoſpital ſerjeant, and expended in the meſs, or as the Surgeon points out.

The men juſtly complain of this heavy tax; and it is for their ſakes alone I mention it here, in hopes, if theſe pages fall into the hands of any who ſtill purſue the ſame cuſtom, they may reform this abuſe, and act differently. They muſt know, that the privates pay for their medicines independent of this, which the Surgeon of the reſpective regiments receives for the purpoſe of furniſhing medicines, and things that may be comprehended under this head: for though they urge, that bread and milk

milk forms no part of the Materia Medica; in a ſoldier's caſe, I would inſiſt that it does, and that not only theſe, but every thing beſides ordered by the way of cure, ſhould be held in this light, and procured from the medicine fund: and here let me take notice of another auxiliary of the ſame nature, flannels for wrapping round limbs, ſhoulders, arms, &c. affected with rheumatic pains: Theſe, like the others, are often preſcribed, and often with as much propriety. But can a ſoldier afford to buy a yard, or half a yard of flannel, when he needs it for ſuch complaints? A dozen or more of proper ſizes, ſhould be kept in the hoſpital, and lent to them occaſionally; the medicine money can afford all, and ought to afford them.

What I have ſaid on this head will apply to oat-meal: this is uſed likewiſe in caſes of various kinds in the form of poultice mixed with ſome other medicines, and with much ſucceſs, in ſwellings of different kinds;

kinds; it is uſed as a proper vehicle for applying lead either in form of Sach: Saturn: diſolved in water; or in that preparation known by the name of Goulard's Vegeto-Mineral Water. When Beer is ordered in poultice, the ſame will apply to it. Some Surgeons apply oat-meal, and ſtale beer to ill conditioned ſores; and they ſay with good effects: when this is the caſe the Surgeon, not the patient, ought to bear the expence; he is paid for all; therefore he ought to afford every thing he finds it expedient to preſcribe, that part of regimen comprehending diet and culinary articles excepted.

Where ſuch exactions are made, I mean when every thing proper, ſuch as is now mentioned, are with-held from the ſoldier, when the medicine money can afford them, the military laws ſhould interpoſe. And if Surgeons were compelled to return threefold, or ſomething of this ſort, to the man from whom they had made this exaction, with a public reprimand from the

Commanding

Commanding Officer, it might be the means of reformation; but it is not for me to preſume pointing at the mode: I muſt content myſelf with pointing out thoſe abuſes that ſeem to call for reform.

An orderly officer, it is true, viſits the hoſpital in camp daily; in quarters, generally weekly; but I fear it is too much a matter of form with many. The report he returns to the Commanding Officer is as often taken from the Surgeon as from the patients. Indeed, he comes rather to enquire if any thing be wanted, ſuch as firewood, ſtraw, &c. than to hear complaints. He ought to viſit the medicine-cheſt, and ſee that it be well furniſhed; but of this in general he is a very incompetent judge; Beſides, the Surgeon will ſeldom complain that medicines are wanting, when he knows he muſt himſelf procure them; or, in other reſpects, lodge an information againſt himſelf: But with theſe remarks I muſt leave this ſubject, and haſten to another of no leſs importance.

CHAP.

CHAP. XII.

Of the Puniſhments of the Soldiery, as far as the Surgeon is concerned.

THE military laws are ſtrict, and it is abſolutely neceſſary, for the proper behaviour, and ſubordination of the privates it ſhould be ſo. For this purpoſe Court-Martials are often conſtituted to take into conſideration the offences of thoſe againſt whom accuſations have been lodged, and puniſhments are frequently the conſequence.

THE Britiſh diſcipline may be called ſevere, yet it is in many reſpects more lenient than what the ſoldiery of ſome other nations experience. It is often indeed found neceſſary to puniſh faults not only proceeding from deſign, but thoſe from negligence. If this was not done, negligence might prove

of the worſt conſequence to an army. Among the Pruſſian ſoldiery this is carried to a degree far beyond any thing we are acquainted with in the Britiſh ſervice. Dr. Moore informs us, that if even a ſoldier's hat is blown off by the wind, he is ſeverely puniſhed for it, although it cannot be ſuppoſed he made an agreement with the winds for that purpoſe. If, in the ſhock of a charge, a dragoon, by a dangerous accident, falls from his horſe, and is thereby liable to be trampled to death by thoſe that come after him, yet if he ſurvives the accident, he is brought to the Halbards; "by this means," ſays one of his Pruſſian Majeſty's Generals, "we teach them the double danger of negligence, and force them to be conſtantly attentive to their duty."

In his Britannic Majeſty's ſervice we find them however occaſionally ſevere. Anthony Gregory of the tenth regiment of foot, in the year 1759, was puniſhed with a hundred laſhes for ſuffering the queue of his hair

to

to drop off when on duty; his hair was ſhort, which obliged him to wear a queue, which perhaps he had that morning careleſsly tied on.

When court martials meet, and puniſhments are decreed, a diſagreeable duty devolves on the ſurgeon; for no man by the military laws, can be flogged without his attendance. It becomes his buſineſs diligently to watch over the ſufferers; for ſhould the puniſhment adjudged prove greater than it is his opinion the delinquent can bear without hazard of his life, he has authority to ſtop the Drummers (the executioners) at any period of it, and order him to be taken down.

This duty is, truly, one of the moſt diſagreeable he is called on to perform: and one, likewiſe, that requires no ſmall ſhare of penetration to diſcharge conſcientiouſly; for impoſition though ſomewhat a juſtifiable one, is no where apter to be practiſed than here.

Where

WHERE is the man that will not endeavour to avoid puniſhment, if he thinks ſtratagem can accompliſh it? with this view, the ſurgeon will ſometimes find the ſufferer fall into a ſeeming deliquum animi, before receiving his firſt twenty-five laſhes*; perhaps before he is much hurt, or almoſt any of the cuticle of his ſhoulders lacerated; if the court martial has adjudged him much puniſhment, he ſhould not be taken down at this period; there are few that cannot, with the utmoſt ſafety, bear double, or treble this number; if it be feigned, which may be diſcovered by the ſtate of his eyes, for this very reaſon he ſhould not be ordered down.

IT is no uncommon thing, indeed, to ſee feigned fainting fits on theſe occaſions, in order to excite the commiſeration of the

* At the end of every 25 ſtrokes, a freſh Drummer takes the cats; and this rotation is continued till the puniſhment is finiſhed.

ſpectator,

ſpectators, particularly the commanding officer, in hopes of pardon; but we acknowledge it may at the ſame time be real; for the firſt few ſtrokes in lacerating the ſkin, give more pain than a great number afterwards, when once it becomes ſo bruiſed and deſtroyed in its texture by the *cats*, as to deaden and blunt its ſenſation. To an anatomiſt this, I apprehend, will appear rational and evident; he knows the ſenſibility of the cutis from the great number of nerves that enter it; nay, even the cuticle which many held as altogether void of ſenſation, and to be compoſed of lamellæ, without nerves, has been ſuppoſed of late by ſome diſtinguiſhed anatomiſts to be almoſt entirely a congeries of them;* but this is a ſubject we ſhall not at preſent enter into; it will require much more inveſtigation than it has hitherto underwent, to elucidate it ſatisfactorily.

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* Vid. an account of the nerves as ſeen by Prof. Monro, in the Med. Comment.

The trapezius, and head of the deltoid muſcles, which lie moſt in the way of the inſtrument of puniſhment, and have but few nerves, comparatively, entering their ſubſtance, do not feel ſo acutely as many other parts of the body. All parts deeply covered with fleſh, if they have not leſs ſenſibility, are at leaſt leſs liable to danger from wounds. This is ſufficiently proved by the common method of puniſhing diſobedient children. The poſteriors, on which they generally receive it, are compoſed of three large muſcules, called glutæi, and which as it would ſeem, are endowed with leſs ſenſibility from the ſmall number of nerves that enter them, than many other parts of the body, bulk for bulk conſidered; it does not require the ſkill of an anatomiſt to point out this to the offended parent. Common ſenſe, and experience both ſhow that little injury will be done the child, from conſiderable puniſhment on this part of his body.

ANOTHER reaſon is, the part yields to the ſtroke, and its force is thereby broken; the ſame degree of puniſhment, that is, ſtrokes of equal force, on the tibia, the ancle, or other parts little defended with fleſh, would receive injury much longer felt, and not ſo eaſily removed; the hard bone below acting as a fulcrum, would give the ſtroke its fulleſt power; while the veſſels, nerves, and membranes of great ſenſibility lying between, muſt be bruiſed in proportion.

THAT part of the Deltoid muſcle covering the ſhoulder, is likewiſe compoſed of a large quantity of muſcular fibres. Hence in the moſt common method of puniſhing ſoldiers, it is not only prudent but rational to teach thoſe whoſe duty it is to execute it, carefully to avoid the ribs, and inflict it on this part. The pain alſo becomes leſs from the numbneſs that takes place by conſtant flagellation, for perhaps half an hour at a time. Should the ſufferer really fall into a

deliquum

deliquum, ſome of his puniſhment paſſing during ſome ſeconds of inſenſibility, is, I think, in his favour, ſince he feels not, or at leaſt obſcurely, what he now receives.

We find this a wiſe proviſion of nature on all occaſions, where pain becomes exceſſive, and irritates the ſyſtem too much; here the powers of life, as it were, are at once ſuſpended, and an interval of inſenſibility follows, whereby, like ſleep, perhaps, to the wearied ſyſtem, it is in ſome meaſure recruited, and rendered capable of withſtanding the threatening danger. In this ſenſe a ſlight deliquum is far from being alarming: it only becomes ſo by its duration; beſides, the continuance of the ſtimulus of flagellation is one of the beſt means of recalling the patient back to ſenſibility. In ſlighter caſes, then, of deliquum the puniſhment need not be interrupted; a few more ſtripes will bring the ſufferer again to himſelf, and prove that all our fears of danger were groundleſs.

YET cenſure me not for want of humanity when I ſay ſo; it will appear by and by, that my motive is very different. If, on the other hand, the deliquum continues, and he cannot be rouſed in the ſpace of a few ſeconds, or if he turns cold, I always look on it as attended with danger. When I obſerve him ſweat profuſely on the face, as I have ſometimes ſeen, I likewiſe look on his ſufferings as ſevere; and here I think it incumbent on me to attend well to the conſequences.

SOLDIERS during their puniſhment never fail to call frequently for drink; and they ſhould always be indulged in this to the utmoſt of their wiſhes; for it is the ſame now, as we find it in ſome kinds of fevers, the great waſte of liquids from an increaſed action of the heart, and from irritation, together with the violent efforts uſed by vociferation, as long as they are able, and toſſing to get looſe, demand a ſupply, which in ſome meaſure refreſhes them, and mitigates their pain. If refuſed this, which the wants

of nature now loudly call for, they muſt bear a double load; the pain of the whip, and the added uneaſineſs of thirſt; indeed, we ſhould look on the puniſhment as a ſevere paroxiſm, or temporary fever; with regard to the pulſe, I never could depend on it in ſuch caſes; this will appear evident when we conſider the ligatures upon the extremities, which if they do not alter, at leaſt impede free circulation.

If the deliquum continues beyond the time ſpecified above, the puniſhment ſhould be ſuſpended a little, and drink adminiſtered, which ſhould always be in readineſs, with the uſe of ſome other ſtimuli, ſuch as throwing cold water on the face, holding ſtrong volatile ſalts to the noſe, rubbing ſome volatile alkaline ſpirits on the temples, &c. and at the ſame time carefully obſerving the ſtate of the eyes. In a true fainting, theſe are inſenſible to the ſtimulus of light; nor are they affected by threatening danger, ſuch as making an attempt to ruſh the finger into them, and the like; the

ſame may be ſaid reſpecting convulſions. The eyes will remain motionleſs, nor will the pupil contract and dilate by ſtimuli that were wont to affect them. For inſtance, if the head be now turned up towards the ſun, the light, though too great for a healthy eye, will not induce any contraction in the pupil. I have, however, ſometimes ſeen convulſions feigned as well as faintings: it is neceſſary therefore to be on our guard. But this will, in general, guide us in forming our opinion of the degree of the delinquent's ſufferings, and aſſiſt us in knowing when the caſe is attended with danger, or when little or none is to be apprehended.

SHOULD the offence be ſuch that the commanding officer thinks it his duty for the good of the ſervice *, and the diſci-

* The following anecdote is told as true, and will ſhow how beneficial to the ſervice, and ſafety, perhaps, of the army, occaſional ſeverity to individuals may prove.

pline, and character of the regiment, perhaps ſafety of the inhabitants of the place, as well as for an example to deter others from the commiſſion of ſuch offences, to have the whole inflicted, that the court-martial had adjudged him to undergo, whether at twice or thrice; if the ſurgeon is of opinion he can bear it without riſque of danger to his life, let him, by all means, receive the whole at once. I adviſe this from principles of humanity: for it will ſave the unhappy man a great deal of additional ſuffering.

During the late war in America—a grenadier ſtruck Captain Boſcawen;——a court-martial adjudged him a thouſand laſhes; which ſentence was ſo perfectly diſapproved of, that General Howe ordered it to be torn, and the man to be ſent back to England.

In a few days another officer was ſtruck, from an idea the thing would be paſſed over.—But mark the difference—in three hours, (ſays the anecdote) *the man was hanged*—there was no more ſtriking.

Let us ſuppoſe him taken down at the end of two hundred and fifty, or three hundred laſhes; and that his ſentence was a thouſand; all which he muſt receive, whether at two, three, or more times, before he is releaſed from confinement. This, abſolutely ſpeaking, is giving him far more pain, than the court-martial intended, unleſs they had particularly ſpecified in their minutes, that he was to receive them in this divided manner. This we ſhall be eaſily able to prove.

Let us ſuppoſe the Surgeon orders him down; that he is conveyed either to the Guard-houſe or Hoſpital; is daily dreſſed till the wounds are healed, and a new cuticle formed, which may be in a month or five weeks. He is now become able to wear his clothes; yet, perhaps, ſcarcely able to ſuffer the weight and friction of his croſs-belts, or the preſſure of his hammerſack; the parts are as yet red and tender, notwithſtanding, he is ordered a ſecond time to the halbards; and

at

at the end of two or three hundred more, is a ſecond time taken down, cured as before; a third time brought there, and ſo on, till the whole puniſhment be inflicted.

Those who conſider the nature of the human body, will readily allow, that the ſecond part of his puniſhment, muſt coſt him at leaſt, double the pain of the firſt. To illuſtrate this to ſuch as are leſs acquainted with medical ſubjects, we deſire them only to reflect on the pain they felt from a cut finger, or leg, after the wound is newly cicatriſed, and the dreſſings are laid aſide. They will agree with me, that they felt a tenfold ſenſibility in the part to what it uſed to poſſeſs. The very air affects it; and a ſmall injury at this time, before the cuticle thickens, and the part ſtrengthens, ſuch as a trifling blow, which on other occaſions would not give uneaſineſs, gives now exquiſite pain. Even more blood veſſels, as well as nerves, ſeem now to be formed in the part than it was endowed with before, which age will obliterate as the cuticle

cuticle condenſes. We obſerve this take place in the infant ſtate. Youth poſſeſſes many blood veſſels, as well as nerves, which in riper years collapſe and diſappear. This is evident from the florid countenance of youth, compared with the wrinkles and pallid appearance of age.

Some will probably explain this from the ballance falling on the venous ſyſtem. Anatomical injections, however, demonſtrate innumerable veſſels in the infant, that cannot be ſhewn at a late period of life. As nerves are always found to accompany arteries, the better to communicate that reciprocal action which they exert on each other, and by which their functions are more completely performed, it is reaſonable to ſuppoſe many of theſe are obliterated alſo, as being no longer neceſſary. This at leaſt we are certain of, that age is very far from being ſo mobile as youth. The blunted paſſions, the ſtiffened motions of the body, and hardneſs of each fibre;

fibre; nay, a thouſand things unite to confirm it.

CAN a young animal of any ſpecies bear the ſame fatigue, pain, or cold, as one that is arrived to maturity? We ſee children ſuffer conſiderably in a degree of cold from which a grown perſon would feel no inconvenience. In like manner we obſerve them ſuffer greatly from a chaſtiſement, inflicted for ſome fault, which would ſcarcely be felt, much leſs complained of by an adult. It is exactly the ſame with the ſoldier carried a ſecond time to the halbards before his late wounds have been properly united, or the new cuticle properly condenſed by age. This part is juſt in the ſtate of a child's body; i. e. it is endowed with far greater ſenſibility from its recent growth, than it will be ſome months afterwards: it is no wonder then if he now ſuffers in proportion.

We know, that if a part of the body in health be covered ſome time, it becomes more delicate and ſenſible: for inſtance, the hands. Suppoſe on one hand a glove be daily and nightly worn for only a few months, and the other allowed to remain bare; take off the glove, and expoſe the hand to the air, it will feel the cold much more ſeverely than the other that remained uncovered. It is the ſame, then, in the caſe above. The parts puniſhed have been long defended by double coverings, and ſoftening and lubricating dreſſings to favour the re-union; all this muſt ſurely add to its ſenſibility; but it ſeems obvious, and needs no farther illuſtration.

Yet as this train of reaſoning may be refuſed by ſome, however clear it may appear, we ſhall prove the fact, that more veſſels do exiſt in parts newly cicatrized, than in others where no injury has been lately received. Dr. Monro has made experiments with this very view, one of

which was on a pig, the part was cut out after it healed, and injected; an account of which the reader will find in his obſervations on the nervous ſyſtem. After relating the experiment, the learned author concludes, "I will now add, that in calli, "cicatrices, or acretions, there are numberleſs new formed veſſels, filled in the "living animal with red blood, and which "can readily be injected *."

Now it muſt appear from all this, that if the delinquent be taken down, cured of his wounds, and immediately after tied up again, he ſuffers a puniſhment equal to the whole each time, ſhould he be tied up ever ſo often. Surely this is what the court-martial never intended; and is a cruelty the Surgeon ought to point out, and endeavour to guard againſt, by explaining the reaſon, if the officers be unacquainted with it.

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* Vid. obſ. on nerv. ſyſtem, p. 86.

THE danger of recovery after a thouſand laſhes is, I own, vaſtly greater than that from two or three hundred; but I am ſtill of opinion, there is little difference in the ſum of the abſolute pain, if given at once.

HALL, was ſentenced to receive five hundred laſhes for houſe-breaking. He got four hundred of them before he was taken down; and in the ſpace of ſix weeks was judged able to ſuſtain the remainder of his puniſhment, as his back was entirely ſkinned over. The firſt twenty-five of this ſecond part tore the young fleſh more than the former four hundred, the blood pouring at the ſame time in ſtreams, as if a number of veins had been opened; by the time he got ſeventy-five, his back was ten times more cut by the *Cats* than with his former four hundred, ſo that it was thought prudent to remit the remaining twenty-five, and take him down.

FOR ſome nights afterwards he complained grievouſly, and declared that his

former pain was trifling to what he ſuffered now. Other examples might be added; but to multiply ſuch is diſagreeable. This caſe, however, was ſo evident, that all the officers preſent at this part of the puniſhment remarked it, while the Lieutenant Colonel, a man of great humanity, whiſpered in my ear, to order him down at the above number. In this inſtance, the copious flow of blood iſſuing forth at every laſh, evidently proved an encreaſe of blood veſſels in the new cicatrized parts.

When the Surgeon finds it incumbent on himſelf to take a man down, becauſe it is his opinion he is in danger, he ought as carefully to repreſent the ſeverity of a ſecond or third puniſhment, and endeavour, if poſſible, for the man's releaſe. This he may do privately, without its being known to the delinquent from what ſource his pardon comes; for it is better that mercy ſhould ſeem to proceed always from the commanding officer, whoſe duty it is to keep

keep the privates in due ſubjection, and from villainous actions, than from any other. This clemency may have a proper effect on ſome, and from a ſenſe of gratitude make them behave well, while it will, at the ſame time, gain him a good name in the regiment. Yet, we confeſs, the evil-diſpoſed may take advantage of ſuch mild treatment, and commit bad actions through hopes of experiencing ſimilar mercy *.

From the reaſon adduced in ſupport of my opinion, that a ſoldier ſhould not be taken down till all his puniſhment be given, except when the caſe is urgent, or when he has reaſon to hope the delinquent will be forgiven what remains, which will be known from his general character, and the nature of the crime; none, I am perſuaded, will accuſe me of inhumanity.

* An inſtance of which we have already related in the anecdote relative to General Howe and the grenadier.

My

My advice is ſurely calculated to obviate, as much as poſſible, both inhumanity and cruelty. For though the populace, who are often preſent at puniſhments, and as often, on theſe occaſions, troubleſome, may not ſee this, nor comprehend the reaſon, yet he that reflects muſt acknowledge its truth, and its ſalutary tendency.

ANOTHER thing which the Surgeon ſhould keep in view, in performing this diſagreeable duty, is, the form of the ſufferer's body; the make of his fibre, and ſtrength of his conſtitution. This is a very material thing, and without ſuch attention, he may be guilty of great errors. I need not tell him how much this varies in individuals; nay, ſo much, that perhaps, no two on earth are in this reſpect exactly ſimilar.

SOME are of a more robuſt, ſome of a more delicate make; ſome from this endowed with great ſenſibility, others again, far

far leſs ſenſible; he muſt never let this eſcape his penetration. Experience in making obſervations, and comparing the difference of the form of body in different men, will enable him to judge in this neceſſary part. Men of red or fair hair, with ruddy complexions, and of a ſmall, or tall and genteel ſhape, or that are plethoric; men of a ſcrophulous habit, or ſuch as have a tendency to diſeaſes in the cheſt, or are conſtitutionally weak; will be more affected by a given number of laſhes, than a man of a hard denſe fibre, with three times the number.

The way of life, i. e. the trade they have been bred to, unleſs they have long left it off, may add to this. Taylors, for inſtance, who are much confined within doors at their employment in the army, are more delicate and tender than thoſe who are always in the open air.

Edwards, in the end of 1781, was ſentenced to receive fifty laſhes; he had got

got drunk, and otherwiſe miſbehaved. In the army this number is accounted next to nothing. So much, however, did this ſmall puniſhment affect him, that notwithſtanding every degree of attention to his cure, it was upwards of three months before he could bear his croſs-belts, or even move his arms to work. Perhaps 50 more would have rendered his life in moſt eminent danger; he was of a thin, tall, genteel ſhape; his hair black, but ſoft, woolly, and thin on his head, with a ſkin remarkably white and ſmooth; he was a taylor.

Those, on the contrary, of a dark, or brown complexion, of black hard hair, or hair of a reddiſh brown, and curled, are generally of a robuſt conſtitution. I mean here, perſons of adult age; tho' we can obſerve the ſame difference almoſt in infancy by comparing ſimilar ages, but not ſo fully marked. Men who have much hair on their bodies, are ſtronger than thoſe who have little or none. In a word, thoſe of,

or

or tending to the melancholic temperament, are always ſtronger and abler to bear puniſhment than the ſanguine, or choleric; as alſo men of large bones, and their muſcular parts equally furniſhed. I ſhould be afraid to puniſh a perſon of a leucophlegmatic habit, ſo much as the melancholic. Though the ſhades of temperament gradually ſlide into each other, yet enough may be obſerved to aſſiſt us in forming our opinion with regard to the ſum of puniſhment men in the army can ſuſtain without danger.

BURCH, a grenadier, received three hundred laſhes for deſertion, in Auguſt, 1782. He bore this puniſhment without the ſmalleſt groan, or ever moving from the moment he was tied up till he was taken down *;

* Some, however, do not complain, thro' what may, perhaps, be called ſomething like fortitude.—In a public paper I lately found the following anecdote; whether it will apply here, I cannot tell. "It is not long

nor was he ſo much cut as I have ſeen others with much leſs; for inſtance, in the laſt example. He was about forty years of age, five feet ten inches and an half high, with a proportionable thickneſs; not corpulent, but had large bones, and of an athletic make; his ſkin of a hard firm texture; and on the whole, what may be properly called, a robuſt man. He had alſo been in the army eleven years, part of which he ſerved in the Weſt Indies.

ſince, "ſays this account," in France, a ſoldier received two hundred laſhes without *flinching*; the officer, therefore, ordered the fuſilier to ſtop, and ſtabbed him with his ſword—the ſoldier dropped, and in the moment of dying, ſaid—"thank God."

Lately, in England, not far from the Metropolis, ſays the ſame account, a ſoldier received four hundred laſhes, he too, ſcorned to *flinch* for ſome time, till by a moſt dreadful repetition of ſtripes, he groaned, and dyed.——What a pity there ſhould be (if there really is) a neceſſity for ſuch horrid puniſhment!

SERJEANT,

SERJEANT, a grenadier, in the latter end of the following October, received two hundred laſhes for theft, yet he was not as much as cut by this puniſhment. He was tall, appeared even lean, fibres hard, and ſkin brown. His back was only blackened, and the veſſels beneath the ſkin a little lacerated, as appeared from this colour, which proceeded from extravaſated blood; but the thickneſs and denſity of the cuticle prevented it from being cut; yet the laſhes were given with as much force as the drummers, who were ſtrong men, could apply. The Adjutant of the regiment, on my mentioning how little effect the puniſhment had on the man, declared to me, that though he had ſerved moſt of his life in the army, he never ſaw laſhes, as he phraſed it, *better laid on*. This man was of a ſtrong fibre, dark black hair, hard and criſped; ſix feet an inch and a half high, and twenty ſeven years of age, had been ſeven years in the army. I mention the length of ſervice, becauſe when inured to

the life of a ſoldier, they bear its viciſſitudes much better; and puniſhments I term one of them.

SHEPPARD, received five hundred laſhes for houſe-breaking, and was entirely well in three weeks. Hall, who was his companion in this action, and ſuffered at the ſame time, was ſix weeks before he recovered from his four hundred, and his ſeventy five given afterwards, made him an object of great diſtreſs. The difference of theſe two in conſtitution was remarkable, and eaſily diſcerned, even by thoſe of no medical judgment. Had Sheppard received one thouſand, his puniſhment would not have been equal to the others at four hundred; he was fit for duty, we find, after his five hundred, in half the time.

HENLEY, for deſertion, received only two hundred, but this was more to him than fifteen hundred would have been to this man. The head of the deltoid, the longiſſimus

longiſſimus dorſi, the trapezius, and other muſcles in the way of the cats were greatly injured. When the wounds were cleaned, and the ſkin and bruiſed parts had ſuppurated off, the ſpine below the trapezius, and part of the ſcapula were laid bare. I never had ſeen ſo much of the muſcular parts deſtroyed, in any caſe from puniſhment, before. His ſtature was ſmall, about five feet two inches; his ſhape proportionably delicate and ſlender; his bones very ſmall; his body lean; his hair a fair brown, thinly covering his head, ſoft, lank, and without the ſmalleſt curl. He was twenty-three years of age, and had only been three months in the ſervice.

A FEW days after he received his puniſhment, he was ſeized with an inflammation in his throat, which ſoon went off, but was ſucceeded by loſs of motion in the lower extremities, which was upwards of a fortnight before it could be removed. A large abſceſs formed below his left ſhoulder,

ſhoulder, and conſiderably lower than where the cats had cut him; viz. about the ſixth rib, and towards their inſertion into the ſpine.

On the fourteenth day, after his puniſhment, I opened it, from which iſſued more than two pounds of pus, mixed with blood; before it was opened, its bulk was as large as the crown of a hat. I attributed the want of motion in his limbs to the inflammation of the abſceſs, and I may likewiſe place his recovery to the removal of the pus. Had it made its way through the intercoſtals, and thence into the cavity of the thorax; or had the inflammation reached the lungs, the caſe might have ended in a hectic fever, and death. It was upwards of ſeven months before he was ſo far recovered as to be able to do his duty.

This caſe alone, is ſufficient to point out the neceſſity of paying due attention to the ſtrength and conſtitution in ſoldiers puniſhments.

niſhments. To contend that all can bear five hundred, or a thouſand ſtripes, becauſe ſome are found to ſuſtain them without much danger, would be as abſurd, as to contend, that becauſe one man has eſcaped death in the midſt of an engagement, all will do the ſame.

During the time of puniſhment, we ſometimes obſerve the back tumify conſiderably; in the more delicate, it puffs up under the cats, in a very ſhort time, and to a great degree. I have frequently noted this, and it is one of my characteriſtic marks of a tender habit; it is a ſure ſign of a laxity of fibre. This ſhould not be overlooked in the quantum of the puniſhment, even ſhould ſome of thoſe marks, already mentioned, be abſent, or at leaſt doubtful. The robuſt ſeldom ſwell, with a moderate puniſhment. In ſuch delicate habits, inflammations, and large ſuppurations enſue.

Jones,

Jones, a grenadier, was puniſhed in December 1782: The tumefaction took place to a high degree, and it was with no ſmall difficulty it could be diſcuſſed. Dale, who was puniſhed in the beginning of the following month, was, in this reſpect, ſtill worſe. For upwards of a fortnight he loſt the uſe of his limbs.

In diſcuſſing theſe inflammations, when it is practicable, I have ſucceeded beſt by the liniment: ſaponac. The inflammation generally takes place below the lacerations; ſometimes as low down as the laſt vertebræ of the back; and in one caſe the gluteus was ſlightly affected. It is poduced by the great quantity of extravaſated blood, which falls from the wounds above, and from the great degree of excitement in the neighbouring veſſels, communicated by the injury which the contiguous parts ſuſtain.

When this tumefaction, during puniſhment, is obſerved to take place to any great degree, the ſoldier ſhould be taken down;

it portends danger in proceeding farther. Such was the caſe with this unfortunate man. I had never obſerved the tumefaction ſo great with the ſame number of ſtripes. He was of low ſtature; ſkin white and ſoft; indeed he had very nearly fallen a martyr to the puniſhment. An abſceſs, ſuch as already deſcribed, formed in the ſmall of the back, by the falling down of the extravaſated blood, between the muſcles, and dorſal vertebræ, after it was opened, and almoſt cured, a ſecond, ſtill lower down took place, viz. about the laſt of the dorſal vertebræ; theſe produced a ſevere fever of ſeveral weeks duration, and the copious diſcharge, which continued long, reduced him to a mere ſkeleton.

We muſt not omit giving ſome hints here relative to tying the delinquent to the halbards. This is generally performed by the Drum-major, and the Puniſhers, over whom he preſides. But I am of opinion

the Surgeon ſhould inſpect the whole. He ſhould ſee that the arms, which are generally ſtretched above the head, and tied about the wriſts to the halbards, be neither too tight bound, nor over ſtretched. The ſame ſhould be obſerved of the cords that faſten his thighs. I have ſeen inconveniences ariſe from want of attention to this article, where the hands above the ligatures, from the ſtoppage of circulation, have turned black, and remained numb, and cold, for upwards of a week afterwards; this accident will follow, when a man is injudiciouſly bound, ſo that he hangs, as it were, by the hands. The thighs ought to be conſiderably tighter bound than the hands, becauſe it more effectually prevents ſwinging, which is always prejudicial, and renders the puniſhment both more ſevere, and attended with greater hazard.

But if the cords be too looſe, it is as bad; for room is now allowed for ſwinging, and leaping about, to avoid, if poſſible,

ſible, the ſtrokes, whereby it is out of the power of the Puniſher to give them on the parts where he is directed, and is often the cauſe to the Drummer himſelf of ſome ſtripes for not doing his duty with more exactneſs. By this means, the *Cats* falling on improper parts of the body, may prove dangerous; if too low, affecting the ribs, it is bad; it is too near the vital parts; if too high, on the neck, or even twiſting round on the breaſt, it is not leſs inconvenient; nay, what is worſe, by their ſwinging, I have ſeen the cheeks cut, and the eyes in danger. The poſſibility of loſing an eye in this manner is very clear; for it would be a thouſand to one if the ſight could be preſerved after an accidental ſtroke from the *Cats*. They ſhould then be admoniſhed before the puniſhment commences, to ſtand as firm as poſſible; for, as they cannot avoid the ſentence of the court-martial, the more they toſs, the greater is their puniſhment. To ſtand *fair*, as they term it, ſaves pain, not only to themſelves, but

ſeveral ſtripes to the poor fellows, who are obliged to execute the ſentence *.

ANDERSON, was puniſhed in April 1783. He behaved ſtubbornly, and would not permit himſelf to be ſo well bound as it was neceſſary; the cords that bound him were too looſe; he had too much room to ſwing; and all the accidents I have mentioned, except the injury to his eyes, took place; the *Cats* plaited round his neck, and even cut his cheeks. The Puniſhers were obliged to ſtop, and bind him firmer. We ſee then, a medium is to be obſerved in this affair.

THE Surgeon's attention ſhould likewiſe be turned to the parts on which the cats

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* The Adjutant charges the Drum-major, and often enforces it by a ſtroke of his ratan, to make the Drummers *do their duty*; he in return, ſtrikes the Puniſher, who, if he is able, is compelled to add force to his next ſtroke on the delinquent.

fall

fall. The mode of puniſhing, in general, is, for each Drummer, appointed on this duty, to give twenty-five ſtrokes in turn, till the ſufferer be ordered down. Some of them ſtrike with more judgment than others; the ſurgeon ſhould attend to this, and caution them to let their ſtrokes fall on the ſhoulders, yet not on the neck. To puniſh ſo low down as the ribs ſhould be religiouſly avoided; it is not a little dangerous; the heart, lungs, and other noble viſcera are too contiguous, and will be affected in proportion.

Let as little new ſkin as poſſible be wounded, for the reaſon already given, that the cutis, cuticle, &c. are endowed with great ſenſibility. I trembled always for the unhappy ſufferer, when a left handed Drummer, puniſhed in turn, with thoſe uſing the right. His ſtrokes cut exactly acroſs thoſe given before him, and by this means, both more muſcular ſubſtance, and new ſkin was torn. The

ſloughs,

ſloughs, that ſuppurate off in the courſe of the cure, are always deeper, and the patient, of courſe, longer of recovery. I could wiſh to exclude ſuch men, for the ſake of the ſufferer; at leaſt, I would eſtimate twenty-five ſuch ſtrokes at fifty of thoſe given by right-handed Puniſhers; for I am confident they do him more injury than fifty, where the cuts lie all one way.

Since, from the nature of the Surgeon's duty, and the military laws, he has ſo great a ſhare in puniſhments, I muſt not omit another caution he is to obſerve; that is, the ſize and weight of the cats. The cords ſhould be ſmall, by which means they will cut cleaner, and bruiſe leſs; nor ſhould the ſame cat be long uſed at one puniſhment; for by the additional weight of blood, with which they are loaded, the ſeverity of each ſtroke is greatly augmented; they fall now on the ſufferer's back, like ſo many *flails*, to uſe the poor men's own expreſſion. They have often, afterwards,

afterwards, on my dreſſing them, declared, that one ſtroke from a cat loaded with blood, gave them more pain than four from a dry one; it is evident it muſt be ſo.

It is often, from thence, that large and dangerous inflammations take place, and thoſe dreadful ſuppurations already mentioned. In two caſes, where theſe ſuppurations were large, from the long continuance of the diſcharge, I not only dreaded a hectic, but a corroſion of the ends of the ribs, connected with the ſpine, even from the top of the trapezius, to the extremity of the latiſſimus dorſi.

Sinuses always form here, and extend on every ſide, running far beyond where the cutis is wounded; the cellular ſubſtance is always corroded, and melted down, and the cutis with its cuticle left detached; ſo that by lifting it up with the forceps, to ſyringe the parts below, we can ſee down from the trapezius,

trapezius, between the cutis and the muſcular parts, to the laſt vertebræ of the loins, where it is always neceſſary to make a counter opening, to allow the diſcharge a free exit.

In many regiments, it is likewiſe cuſtomary, never to waſh the cats after puniſhment, but to allow the blood to dry on them, to render them more ſevere; but I cannot avoid expreſſing my diſapprobation of this method. It is adding greatly to a puniſhment, which is already, from its very nature, accompanied with too much ſeverity. I am firmly of opinion, that the cats ſhould not only be waſhed clean, after every puniſhment, but that the ſame cat ſhould not be uſed in more than fifty laſhes in the ſame puniſhment, to avoid the bruiſes that conſtantly enſue from their augmented weight. The Drum-major ſhould, therefore, be provided with at leaſt ten or twelve cats, which at fifty laſhes a piece, will be ſufficient,

ſufficient, in general, to finiſh the ſevereſt puniſhment.

THESE regulations are entirely in the power of the commanding officer; the military law leaves him altogether at liberty on this head. Perhaps it would have been better, had it been more definite than it is, on a matter that appears to me of ſome moment to the ſervice. Men having a command over others in this reſpect, would not then dare to abuſe it, as ſome inſtances prove to us they have done *. Men would not then, at the caprice of a ſuperior, or their *Governor*, be whipped to death, as ſome recent accounts tell us, has lately been the caſe abroad, in one of the Engliſh ſtations; but the cruel perpetrator of ſuch a deed, though he may fly from the juſtice of his country, cannot fly from his own

* Alluding here to the conduct of a late Governor of one of the Britiſh Settlements.

conſcience * ; a wound muſt rankle there, and poiſon all his future happineſs.

But allowing, that few, or none die, which I believe to be the fact; immediately from puniſhments moderately inflicted, I know from experience in the ſervice, that conſtitutions have been conſiderably impaired by them. We ſometimes find the body melt away into a ſpectre of ſkin and bone, from the large ſuppurations that have followed; nor were they ever able af-

* One account ſays, the perſon alluded to above, ordered five ſoldiers to be tried, and condemned to receive no leſs than fifteen hundred laſhes each; another account ſays, eight hundred with a rope's end; this, if it be true, muſt ſtill be worſe; while it muſt ſhock humanity to reflect on the conſequences. Three, it is ſaid, died of their wounds; and the other two muſt ſpin out the reſt of their exiſtence in miſery, from broken conſtitutions and bad health, which muſt enſue from this barbarous treatment. Vid. the public papers, about the end of 1783, for this account.

terwards,

terwards, as long as I knew them, to bear the ſame hardſhips, as before; and they muſt, from thence, alſo be more incident, not only to contagious diſeaſes, if they be in the way of them, but to other complaints, to which fatigue, or hardſhips of duty may expoſe them.

The true deſign of puniſhment, is to prevent the commiſſion of crimes, not as a ſacrifice for that already committed; if this can be obtained, the utmoſt end of the law is accompliſhed. And may not this be as well done by moderate, as immoderate ſeverity? That ſuch puniſhments are meant as an example, to deter others from the commiſſion of crimes, is proved from their being always executed in the preſence of all the private ſoldiers in the place. They are conſtantly obliged to form a circle round, and be ſpectators: for this purpoſe, the ceremony of ſtripping, and tying up the offender to the halbards, ſhould be rendered as ſolemn and

awful as poſſible, to impreſs their minds the more deeply; but the puniſhment itſelf, ſhould be as moderate as the nature of the crime, and the military law will permit.

The next thing the ſurgeon is to attend to in puniſhments, is the ſeaſon of the year, and ſtate of the weather. In winter, and in cold weather, a man will bear a conſiderable larger puniſhment with leſs danger, than in ſummer, eſpecially if the weather be warm, and has continued ſo for ſome time before; or if autumn be approaching. In cold winter weather, the fibres are tenſe, and rigid, comparatively to what they are in hot weather; and much leſs danger is to be apprehended from fever, which when it has appeared, I have always found more of the Typhus, than the inflammatory Type; I never durſt bleed in it; for it ſeldom takes place till ſuppuration comes on, and the ſmell from the back is conſiderably offenſive;

offenſive; and to theſe putrid ſteams, I always attribute a great ſhare of it.

If the priſoner has been long confined before the court-martial ſat on him, or afterwards, before its ſentence is executed, and the weather all this time continues warm, it is reaſonable to ſuppoſe, that the body will be proportionably relaxed and weakened. Even the dread and apprehenſion of the evil hour, muſt have its ſhare in adding to this ſtate of body. It is needleſs here to enter into a diſquiſition concerning the ſedative effects of fear, and the other depreſſing paſſions; for if they be not the ultimate cauſe, they are allowed by all to be powerful occaſional cauſes of nervous fevers.

Every ſoldier, under confinement, has ſomething to fear; all are not callous. I have ſeen ſome ſuffer more from this than from the puniſhment; we may add, that their ſituation is leſs comfortable in confinement;

finement; they are neither allowed a bed to ſleep on, nor are their food ſo full; if they are placed in the Guard-houſe, they muſt lie on the guard bed, which is always a broad bench, without any thing ſpread over it; if in the *Black Hole*, they have only ſtraw to lie on, and are otherwiſe worſe off, as it is generally a ſmall, damp, dark, confined place. Suppoſe a man kept in this condition for ſome weeks, never having his clothes off, nor ever out of it, except to the neceſſary, &c. under the care of a centinel; muſt he not be debilitated? The Surgeon ſhould keep all theſe things ſtrictly in view.

AUTUMN is the moſt ſickly ſeaſon; flagellation will now be more liable to produce fevers. At this time, then, let him caution the commanding officer, to recommend to the court-martial, that puniſhments may be moderate. The ſmell emitted, in a few days after, from ſo large an excoriaced ſurface, is of itſelf, independent of

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any auxiliary cauſe, ſufficient to produce fever; if contagious fevers be in the place, this muſt greatly prediſpoſe the body for their reception. I have often found the ſmell highly offenſive, both to the patient himſelf, and all thoſe in the room with him.

BURCH, had ſo great a diſcharge from his back, accompanied with a ſmell ſo great, that though a more than ordinary robuſt man, it made him extremely faint and uneaſy; he complained more of this than of the pain he ſuffered, yet he was carefully dreſſed, and waſhed twice a day, and for ſome time ſhirted once every day; the weather was warm; it was now the end of Auguſt.

DALE, who in January following, was puniſhed for ſtealing, ſmelled ſo offenſively, though the greateſt attention was paid to dreſſing, and waſhing his back, as well as to changing his linen, and ſo great effect

did

did it produce on his health, that he fell into a fever, and narrowly eſcaped with life. Though this was at the coldeſt ſeaſon of the year, yet ſo diſagreeable was the room where he lay, to the other patients, that they entreated me, to have him taken out of it, with which I complied, leſt their health ſhould ſuffer, and a contagious fever be induced among them. A ſeparate room was, therefore, fitted up for him, to which he was removed; the hoſpital, happening at this time, fortunately, to be more than commonly large and commodious. From the putrid ſmell of his ſores, it was no eaſy taſk to dreſs him; and ſuch was the precarious ſtate of his health, that I durſt truſt it to no one but myſelf.

Before I finiſh this ſubject, I muſt beg the Surgeon's indulgence, while I give him another caution, which is, never to ſuffer a priſoner to receive his puniſhment under cover; let it be done invariably in the open air; this, as far as I know, is moſtly practiſed.

tiſed. I remember once a propoſal to puniſh a man in the Guard-room of a Fort, the better to avoid the populace, but I ſtrongly objected. I need hardly add my reaſons; it was to allow the man the benefit of the free air, a matter now of ſome moment. Sometimes, to avoid the mob, it may be thought prudent to propoſe puniſhing in the Guard-room, or under ſome other cover; but if poſſible it ſhould be avoided.

PUNISHMENTS ſhould not be inflicted on, or immediately after a march, even ſhould it be ſo ſhort as ten miles; for the ſanguiferous ſyſtem, by fatigue, muſt be accelerated, the body debilitated, and rendered more ſuſceptible of injury. For the ſame reaſon, it ſhould not ſucceed the exerciſes of a field morning, nor yet the morning after a drunken debauch.

FROM what has been ſaid, it will occur, that in warm weather, the morning is the

moſt proper time for puniſhments, as well on account of the coolneſs, as from the refreſhment of the night, if the priſoner has had any place to ſleep in. Should the puniſhment happen in a Cantoonment, at a conſiderable diſtance from Head-quarters, and it be found neceſſary to ſend the priſoner there to the regimental hoſpital, do not oblige him to walk; it is cruel. Let a cart be provided, even if the hire ſhould be ſtopped from his pay; a mile, or a mile and half I do not conſider as of conſequence, nor a cart, in this caſe, neceſſary; but if much more, he ſhould be indulged with one; for though his ſores may not yet render the body ſtiff, or feel ſo painful, as they will ſome hours after, yet his ſpirits and ſtrength muſt be ſo exhauſted, that his limbs may be very unequal to the taſk of ſupporting his body in walking.

Anderson, was puniſhed at Loweſtoffe, nine miles from head quarters; it was found neceſſary to ſend him to the regimental hoſpital.

tal, at Yarmouth. A guard was ordered to eſcort him there; he declared he could not walk, which I very readily believed, and prevailed on the commanding officer, of the party, ſtationed there, to indulge him with a cart: he had walked from head quarters, that morning, under a guard, and to oblige him, after a ſevere puniſhment, to return back on foot, might have proved dangerous.

SURGEONS, are apt to uſe too much delicacy, and do not always contend for their opinion and authority, as behoves them, reſpecting puniſhments. An ill placed delicacy, in this point, may prove ſerious, ſometimes, to the ſufferer. The Surgeon's buſineſs, at puniſhments, is to prevent any danger to the life of the patient, and to take off any blame that otherwiſe might fall on the officers; he ſhould, therefore, exert his authority, and take the ſufferer down, though contrary to the opinion of the whole corps, when he ſees proper reaſon

for it. It is he alone, not they, who is ſuppoſed to be acquainted with the ſtrength of the body, and the human conſtitution. An apology is offered often, by Surgeons, that officers may be offended, if they officiouſly ſtep in to prevent the farther execution of the ſentence, when it may appear to them, that ſcarcely half enough has been inflicted; but he may depend on it, this will not ſcreen him, if he proves too paſſive and obedient, when duty, and well timed tenderneſs, urge him to act differently.

It is true, ſome officers may be raſh enough to cenſure him, if he orders down a delinquent, before receiving, what they may think his deſert; but here, it is not the magnitude of the crime, but the ſufferer's ability, and the danger the Surgeon ſees before him, by which he is to act; nevertheleſs, I am apt to believe, there are very few officers of a diſpoſition

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ſo cruel as to enforce more than the Surgeon thinks enough.

I HAVE ſeen repeated inſtances of the humanity of officers; they have often whiſpered in my ear, on theſe occaſions, and with expreſſive countenances, aſked, whether I did not think enough had been inflicted? and this too, when both the offender's crime, and his ſtrength, appeared to me to deſerve more; inſtances of which, I have often experienced in a Lieutenant-colonel, under whom I ſerved ſome years, who for humanity has, perhaps, ſcarcely his equal in the ſervice.

THEY were always great offenders whom he ever allowed to ſuffer, even till I ordered the puniſhment to be ſuſpended. Robbery, houſe-breaking, ſhop-lifting, theft, are crimes that always call for vigorous puniſhment, as they affect not only the property, but the ſafety of the ſubject; not to mention the honour of the regiment, which every officer

officer ſhould maintain as far as in his power.

SHOULD the Surgeon find many of the officers diſpoſed to blame him for too great lenity, alledging that the ſubjection of the regiment will be injured, and the commiſſion of crimes thereby encouraged, he ſhould take pains to point out his reaſons for his conduct; and endeavour to convince them of worſe conſequences to the character and good name of the regiment, ſhould any die from over-puniſhment. They ſhould be informed, that it is the opinion of many eminent men, that the military laws are already too ſtrict; nor ſhould it be without much reluctance that they are put in force in their utmoſt rigour.

BESIDES, as this is a duty for which he, in a particular manner, muſt anſwer, he is therefore, with reaſon, more concerned for the conſequences. It becomes more incumbent

cumbent on him to guard againſt danger, both for his own, and their reputation. Should a man die, in conſequence of over-puniſhment, I am not certain but he could be tried by the laws of his country for his life; at leaſt, ſuch an accident would fix, and juſtly, an eternal blot on his character, both as a man void of profeſſional knowledge, and of the feelings of humanity.

When a court-martial ſits, it is not the ſtrength of the offender's conſtitution, but the accuſation brought againſt him, that the members compoſing it conſider. Nor do they wiſh to whip any man to death; if he can bear their ſentence, it is well; if not, they are no longer judges, nor are they reſponſible; this is placed in the Surgeon's hands; he is ſet as a counter-balance, and check over the ſeverity of the law, in this reſpect: does he abuſe this great charge committed to his truſt, then is he, indeed, juſtly blameable; nor ought ſuch falſe delicacy,

licacy, or this ill placed deference to officers, in matters of ſuch moment, to ſcreen him, if he be guilty, or leſſen his accuſation. He cannot reſtore life; he ought not, on any account, whatever, to ſtand unconcerned, and ſee it taken away, when he is to be its protector.

And ſhould any military gentleman, whoſe duty calls him to ſit on court-martials, ever chance to look into theſe pages, let me beſeech, let me entreat him, to weigh the matter of offence well; let the accuſation be fully conſidered, and let the unfortunate priſoner be well attended to in his ſtory.

Remember, he has generally few to ſtand his friends; let no prejudice affect him.---But, in doubtful caſes, let them lean always to the ſide of mercy,---for doubtful caſes will occur; where innocence, notwithſtanding the greateſt care to arrive at truth, will ſometimes ſuffer the puniſhment due to the guilty.

"Was it Mackey's regiment, quoth my uncle Toby, where the poor grenadier was ſo unmercifully whipped, at Bruges, about the ducats?—O, Chriſt! he was innocent, cried Trim, with a deep ſigh—and he was whipped, may it pleaſe your honour, almoſt to death's door—theyhad better have ſhot him out right, ashe begged, and he had gone directly to Heaven, for he was as innocent as your honour,"——"Honeſt Dick Johnſton's ſoul to be ſcourged out of his body, for the ducats another man put into his knapſack!—O, theſe are misfortunes, cried Trim, pulling out his handkerchief—theſe are misfortunes, may it pleaſe your honour, worth laying down and crying over *."

MISFORTUNES, indeed!---yet ſuch as will, in the courſe of things, ſometimes unavoidably happen. We ſee men occaſionally ſuffer death, for crimes they never committed, by the force of falſe witneſſes, though the Judges take all poſſible care to ſift the matter; and we have the ſame reaſon to expect that the witneſſes examined on court-martials, by Military Judges, may

* Triſt. Shandy.

not always be influenced by truth; here, there is no room to accuse the court; it must act by the witnesses brought before it: it is all we have a right to expect, when they candidly, and impartially weigh the force of the accusation with the prisoner's defence, and give judgment accordingly.

I NEVER knew an instance, save one, of unmerited punishment, nor could the blame in any degree be laid to the court; as it happened, the punishment was trifling, I think, only fifty lashes. A soldier was found by the patrole, out of quarters, beyond the hour limited by orders; he was likewise without his hat, and standing up by the wall; he was carried to the officer of the guard, who confined him, as it was his duty. At this time orders were strict, on account of several depredations on the property of the inhabitants, that had lately been committed, as was alledged by the soldiery, which produced complaints from the magistrates to the commanding officer: his

his being found in this manner, and without a hat, weighed conſiderably againſt him; it was in vain that he urged he was ſtanding at the door of his billet, and that the door had been ſhut againſt him. The truth was, the landlord had thruſt the poor man out of doors, nor would he give him time to ſeek for his hat; it was a market day; the landlord had company in his houſe, and would not allow him to ſit by the fire, as he took up the room of a gueſt; to retire to his bed, he could not, for the room he was to ſleep in was likewiſe occupied in this way: it was probable ſome angry words had paſſed between them; but however this be, the ſoldier was ſhut out, and found as already related. In the firſt place, orders were diſobeyed; and in the ſecond, the inn-keeper, when examined, inſiſted, that the ſoldier behaved ill: what could the court do? they were obliged to condemn. The poor man aſſured me, during the courſe of his cure, of his innocence. Puniſhed men ſeldom refuſed to confeſs to me, while I

dreſſed their ſores, whether they were guilty or innocent of the crime alledged; but it was too late here, before I arrived at the truth, to prove of any ſervice; the deed was done; the puniſhment was inflicted.

DIFFERENT regiments uſe different methods of puniſhing: in ſome to run the gauntlet, as they call it, is cuſtomary. This would appear a cruel method of treatment, even more ſo than flogging at the halbards. Here, inſtead of *Cats* rods of willow are made uſe of; the whole regiment are drawn up in a line, two deep, face to face: every man is furniſhed with a willow; the priſoner runs naked, the whole length of the line, and every man ſtrikes as he paſſes; no regard can be paid in this way to the part they ſtrike; hence the ribs as well as the ſhoulders are wounded. I conceive, there can ſcarcely be a part from his neck to his heels, that has not received its ſhare.

Hence

Hence appears its cruelty; I am, however, very little acquainted with it, and can ſpeak the leſs poſitively on the ſubject.

In others, again, a different method is in uſe; here they flog alternately on the back and poſteriors; I would object leſs to this than the former. The poſteriors, as well as the ſhoulders, can without much riſque of danger, bear a moderate puniſhment.

The mode is again varied in other regiments by the manner in which the laſhes are inflicted. In ſome regiments of the horſe, I am informed, it is always cuſtomary to count *ten* between each ſtroke; I deem this tardy method of proceeding, likewiſe, an addition to the puniſhment; when they are given more quickly, the patient has leſs time to reflect, and feels the leſs. I hope where this method of prolonging pain, is cuſtomary, an allowance is made by a fewer number. I ſhould ſuppoſe,

poſe, that two hundred laſhes, trailed out in this way, would be felt with more pain than ſix or eight hundred, ſuch as I have ſeen commonly inflicted.

Of the other puniſhments, viz. piquetting, and riding the wooden horſe, I cannot ſpeak much, having had few opportunities of ſeeing ſoldiers puniſhed in either of theſe ways. I am of opinion, they are not ſo frequently uſed as that of which we have chiefly treated here; nor am I certain whether the Surgeon has any concern with them. This is another reaſon why I may paſs them over.

Although I have, ſeveral times, in the courſe of this chapter, inveighed againſt the ſeverity of flogging, yet, when the nature of the crimes ſoldiers are often guilty of are conſidered, it will not ſeem altogether ſo cruel. Their offences, for the moſt part, would bring them to the gallows, were they to be delivered over to the civ

civil law; hence, inſtead of cruelty, it often becomes mercy, and lenity; for when compared to this ignominious death, the idea of ſeverity vaniſhes to nothing.

I THOUGHT it neceſſary to throw out theſe few hints relative to puniſhments, ſince part of a regimental Surgeon's duty is to ſee them inflicted. I wiſh, after all, the military laws knew no ſuch thing as flogging; and that in place thereof, ſome other mode of puniſhment could be deviſed, leſs ignominious; on this head, however, I dare ſay nothing; it is out of my line of life. Though I wiſh it with all my ſoul aboliſhed, as an inhuman thing, more ſuiting the nature of ſavages, than civilized and poliſhed nations; yet, as I have nothing better at preſent, to offer in its place, I muſt leave it as it reſts, and refer it to the wiſdom of a wiſer Legiſlature.

CHAP.

CHAP. XIII.

The Utility of Experiments.---Danger of over-haſty Prognoſtics.

THE Surgeon ſhould inſtitute, whenever an opportunity preſents, experiments tending to advance the ſcience he is engaged in; none can enjoy better opportunities for the application of new and unuſual remedies than army Surgeons. The ſoldier is entirely at his diſpoſal, as ſoon as his name is entered in the ſick liſt; by this means he can repeat trials made by others, and put them to the teſt; or inſtitute new ones, ſuch as may ſeem to him to promiſe inſtruction, and be advantageous to practice.

"AN experiment," ſays a learned author, "differs from a ſimple obſervation, in

in as much as the knowledge that an obſervation affords, ſeems to preſent itſelf ſpontaneouſly to us; whereas, the knowledge we derive from *experience*, is the reſult of ſome attempt we have made, with a view to ſee whether a thing *is*, or *is not*."

"A PHYSICIAN, therefore," (we always place the army Surgeon in this light) "who carefully conſiders the whole of the phænomena of a diſeaſe, may be ſaid to make obſervations; and he, who in the courſe of it exhibits any remedy, and notes its effects, may be ſaid to make an *experiment*."

THAT to make experiments, may require more than the medicines commonly in uſe, we grant; but if the Surgeon has improvement in view, he will not ſtop here for the ſake of ſaving a trifling expence. A little money expended in ſuch laudable purſuits, will be conſidered as nothing, when compared to the ſatisfac-

tion he may receive, or the good he may do, both to himſelf and others.

By trials of this kind, it may be in his power to confute too haſty, or confirm ſtill farther, well grounded concluſions. In his experiments, I would not confine him to articles alone now in uſe in the materia medica: others not yet received, may, occaſionally, be had recourſe to, and their virtues inveſtigated; but all trials on the human ſubject, hazardous to ſafety, are ever to be avoided.

It is not meant here to exclude chymical experiments, if he has an opportunity of exerciſing his genius in this way; theſe may be proſecuted in the army, though not, indeed, very extenſively. It will require no very expenſive apparatus to repeat many ingenious experiments on the different Gaſes; if no uſe to practice ſhould reſult from them, they may prove, at leaſt, a virtuous amuſement, and fill up a leiſure hour

hour more laudably than in diſſipation, idleneſs, or the purſuit of folly. He may try the different ſtrengths of the different articles of the materia medica in decoction, and infuſion; and perhaps, be able, ſometimes, to take advantage of the knowledge he gains by this in his future practice. He may be more fully enabled to tell in what parts of the ſubſtances the chief virtues lie; whether in the gummy or reſinous parts, (I ſpeak of vegetables) and in what proportion they are to each other.

He may try the different antiſeptic powers of different articles, in like manner, without much trouble, and thereby ſatisfy himſelf of the truth of what authors have advanced on the ſubject; and in theſe kinds of trials, who knows, but he may be happy enough to diſcover ſomething which was over-looked by thoſe whoſe experiments he is now imitating, and be led from thence to furniſh us with a better explanation of the *modus operandi* of theſe ar-

ticles, that may point to a better, or more efficacious method of applying them to the human body.

To conduct experiments, requires, however, no uncommon ſhare of ſagacity, when it is conſidered how ſmall a deviation, in many caſes, may occaſion a very eſſential difference in the reſult. Any miſtake, or neglect, however trivial it appears to the leſs attentive, may form the grounds of very erroneous concluſions; but notwithſtanding, we may agree with the learned Zimmerman, that "A man of genius will ſoon perceive the modification he is to adopt, when he is about to put the precepts of others in practice."

It muſt undoubtedly be from ſome miſtakes of this ſort, that cauſe the great variation, which we find in the reſults from the ſame experiments, made by different perſons; innumerable inſtances of this might be adduced from the writings of medical

medical and philoſophical men. There are few who have made any progreſs in theſe ſciences, that have not, in the courſe of their reſearches, had reaſon to lament it; much ingenuity has been thrown away to no purpoſe; perplexity has been created, and truth, inſtead of appearing obvious, been involved in tenfold more obſcurity *, to the fatigue and mortification of the ſtudent, who from this alone, often becomes diſguſted at the uncertainty which ſurrounds him, and laments the mazes in which he finds himſelf entangled.

In our obſervations, previous to an experiment in practice on the human body, many things are to be conſidered; the patient's age, conſtitution; the former diſeaſes under which he laboured, and their ſequelæ in changing, or weakening the ha-

* Examples in thoſe made on the Nervous Syſtem, alſo on thoſe more recently made on Heat.

bit

bit it may likewiſe be expedient to know, as well as the preſent complaint, and its duration; the ſtate of his urine, pulſe, reſpiration; whether he breathes freely, or otherwiſe, and to what it may be attributed, ſhould his reſpiration be impeded; nay, even the poſition he lies in bed ſhould not be overlooked; an uneaſy poſition in bed may effect reſpiration, and create a change in the pulſe, which a leſs attentive obſerver may be ready, raſhly, and erroneouſly to attribute to the medicine laſt given, and mark it down as ſuch; or, perhaps, to a cauſe more dangerous in its nature, an affection of the organs of reſpiration themſelves, &c.

These, and many other minutæ, are attentively to be obſerved, and referred to their proper ſources, in calculating the effects of a medicine, and forming a juſt eſtimate of the reſult of the experiment; effects from ſome, or all of theſe cauſes may take place, and miſlead us in the concluſion,

cluſion. It muſt be from ſomething of this kind that obtains certain medicines credit, which better information ſhows they did not deſerve; or make others be rejected, when they ſhould have been held in eſteem. The many trifling compoſitions, which have from time to time been in great eſteem for the bite of rabid animals, is a ſtrong proof of the one, and the no leſs bitter invectives that were once thrown out againſt the uſe of the Peruvian Bark, is a glaring inſtance of the other.

A FAITHFUL regiſter from the time our experiment commences, of every change in the patient, ſhould be kept, and our obſervations, now eſpecially, made with care and circumſpection.----" Obſervations," ſays an eminent author, " ſhould be exact, clear, and faithful."---If this be neceſſary at all times, it is ſurely punctually to be attended to in making an experiment. In practiſing medicine, nothing, truly, is more neceſſary; yet obſervation, as it is here

here meant, moſt certainly requires a particular *genius*, a turn of mind, that cannot be ſupplied by the moſt *laboured induſtry*. Some, we know, contend, that more is attributed to genius than it deſerves, and even go ſo far as to deny that there is any ſuch thing; yet while ſo many proofs to the contrary daily appear, we muſt beg leave to diſſent from them.

With reſpect to a genius for obſervation, "it is eaſy," ſays Zimmerman, "to diſcover it in each individual, by obſerving how he is affected at the theatre; or at the ſight of a picture, or a piece of mechaniſm, &c. One perſon will ſee only the dreſſes of the actors; another notice the decorations of the theatre; others attach themſelves to the attitudes, and geſtures of the performers; all theſe ſpectators," he continues, "are directed in their *taſte* by ſome particular *paſſion*, and go to the theatre to flatter that paſſion, &c."

In the line of philoſophical knowledge, we ſee likewiſe this variety of inclination; this varied taſte. Whoever refuſed to admit that Sir Iſaac Newton had a greater taſte, a bent of inclination, or genius for mathematics than for poetry, or perhaps any branch of the fine arts? All the induſtry it was poſſible for him to apply, could never, in my opinion, have given him abilities to write Paradiſe Loſt, the Iliad, or the Ænead; and *vice verſâ*, the authors of theſe three great epic poems, could never have unfolded to us the laws of attraction and gravitation, or *untwiſted*, if I may be allowed the expreſſion, a ſunbeam into ſeven diſtinct and perfect colours.

In the purſuit of the different parts of medical ſcience, one ſhows a predilection for anatomy; a ſecond ſoon diſcovers a bias towards chymeſtry; while a third, contented with a more ſuperficial knowledge of theſe, is led to excell in the operative

parts of ſurgery, and the dextrous uſe of the knife; while another, ſtill, is more eſpecially led to conſider the pathology, and phiſiology of the body, the phænomena of diſeaſes, the exhibition of medicines, and poſſeſſes a talent for *obſervation*, tracing their action on the ſolids and fluids of the living animal, and forming uſeful concluſions from thence. Nay, perhaps, there is no perſon, whatever, that does not poſſeſs a particular bias to one purſuit, in preference to another, independent of example, imitation, or habit; and this I would denominate *genius* for theſe ſeveral ſtudies; and to me it appears a full proof that ſuch a thing as genius exiſts.

Helvetius, Johnſton, and Smith have denied that genius preſides in ſo great a degree; and maintain that a man may be what he pleaſes, if he applies himſelf. This, in its full extent, will hardly be found to hold; moſt certainly not, in poetry, and the fine arts. If genius be a ſtrong bent of

of inclination, with capacity for a particular purſuit, that puſhes a perſon forwards, and gives him fortitude, and perſeverance, to ſurmount all difficulties that preſent in it; where this is not to be found, the mind ſurely muſt flag, and excellence never be obtained. More, I am ready to allow, may be attributed to genius, than it deſerves; but to deny its force entirely, would be raſh, and contradictory to the evidence which every day's experience affords.

But to return; we ſhall now ſuppoſe, this inclination, this genius, if you pleaſe, preſent, and that the Surgeon has a natural turn for the cultivation of the different parts of his profeſſion; for if this be not the caſe, he is wrong in joining in it, and has thereby deprived ſome other branch of buſineſs, for which nature had deſigned him, of a member;---he reads of experiments, as he peruſes authors; he is deſirous of knowing the truth, and of re-

peating them; or, perhaps, he doubts of the truth of the reſults, from what ſeems to him the want of probability; or, he is led to make new ones from ſuggeſtions of his own. I ſay, doubts from want of probability; for, perhaps, to doubt, may be conſidered as a mark of his ſagacity and diſcernment. Perſons of little genius or diſcernment, are ſeldom troubled with *doubts*, but take things as they are told them.

When I advance this, I am not ſingular in my opinion;---Zimmerman, who was a man of much obſervation, has told us the ſame thing.---"The man of genius, alone, is able," he ſays, "to determine within himſelf the degrees of *probability*; and hence it is, that he alone can become a great miniſter, a great warrior, or a great phyſician. Such a man knows *how to doubt*, when he perceives, that the reaſons why any particular thing ought to be believed, are of little value; and, on the other hand, he knows how

how to act, when there is greater reaſon for certainty, than *for doubt*.---Men of little minds are not ſuſceptible of doubts of *this ſort*."---But he very juſtly adds---"and they who do nothing but doubt, are incapable of acting like men of genius *."---So, that we find, both not *to doubt*, and to *doubt too much* extremes, which the man of genius and diſcernment equally ſhuns.

If the Surgeon, then, is to repeat the experiments of others, made on the human ſubject, that which he is to imitate, is carefully to be peruſed, and every circumſtance ſtrictly kept in view. From the time he has come to a reſolution, a proper opportunity is to be ſought for his purpoſe; every juſtice ought to be done the experiment, both on the experimenter's account, whom he has thus under judg-

* Vid. Experience in Phyſ.

ment,

ment, and for the ſake of medical improvement, and truth. The ſubjects of the trial ſhould be as ſimilar to one another, as the nature of the thing can admit, or the ſubject requires; otherwiſe he has no right to call this a *teſt*, or regard it, in any meaſure, either as a confirmation, or refutation of the experiment under conſideration. But we muſt repeat here again, that no trial, dangerous to the patient's life, is ever to be riſqued: this would not only be wantonneſs, but wickedneſs; nay criminal, if done knowingly.

Medicines that have been long in the hands of quacks, and that have kept their credit for ſome time with the public, may be analyſed, if convenient, and their virtues inveſtigated; if on this, they are found to poſſeſs activity, trials, in certain determined doſes, ſhould be cautiouſly made, in diſeaſes ſuch as they have been famed for curing.---For, although, moſt quack medicines and noſtrums, are ſome common

common ſubſtances, and often even *formulæ* of them, either now, or heretofore, in daily uſe, triflingly changed for the ſake of diſguiſe; yet we now and then find one among them of great activity, which from cauſes, ſuch as we have formerly mentioned, has fallen into diſuſe with the regular practitioners, but which, i. e. its activity, it ſhould have ſtill held its place in the materia medica. Theſe, by his cautious trials, he may be able to reſcue from empiriciſm, and reſtore again to their deſerved conſequence.

The uſe of arſenic, though formerly employed by phyſicians, has long been almoſt baniſhed regular practice, till lately. Perhaps, the diſcovery of the Puruvian Bark, might have been one cauſe of this; whether this be ſo or not, the ſucceſs that followed its uſe, in the cure of intermittents, diſguiſed in a noſtrum, prepared by *one Edwards*, under the name of his *taſteleſs ague drops*, could not eſcape the notice

of

of the regular faculty. None, however, took up the ſubject, till Dr. Fowler of Stafford lately turned his attention that way. He analyſed it, aſcertained its nature, and performed many ſpeedy cures, not only on agues, but in ſome other diſeaſes, by a ſolution of this mineral, in imitation of theſe noted *drops*.

SIMILAR experiments have been ſince repeated by different practitioners, both in the metropolis, and in the country, in varied doſes, but ſtill with equal ſucceſs. The number of cures, given us by Dr. Fowler, are many*; and Dr. Willan, amongſt others, has publiſhed ſeven caſes of its ſucceſs in agues;---at the end of which, he adds,--- "the above caſes I have given in detail, as being the firſt which occurred, and thence ſoliciting more particular attention; it ſeems only neceſſary farther to add a ge-

* Vid. His Med. Reports of Arſenic.

neral

neral report from the ſum total of patients treated in this manner. The ſolution was preſcribed for about *forty others*, in different ſpecies of intermittents, and ſucceeded almoſt inſtantaneouſly, in every caſe *." The ſolution, he uſed, was made according to the formula, publiſhed in Dr. Fowler's work on the ſubject.

In like manner, I thought it incumbent on me to make trial of it. In the courſe of theſe laſt ten months ſeveral opportunities preſented, in every one of which, it ſucceeded to my wiſh, and without the ſmalleſt accident, or inconveniency whatever, during its uſe. My formula differs, however, ſomething from Dr. Fowler's, in its being more ſimple.---I found it unneceſſary to add either nitre or alkali, nor do I even diſtill the water in which I diſ-

* Vid. Lond. Med. Journ. v. 1. part 2d.—p. 191.

ſolve it. I take ſix ounces, by weight of the common culinary water, uſed in this place, and add to it twelve grains of the white arſenic, of the ſhops, reduced to powder; this I place in the heat of 212 degrees, or that of boiling water, the phial being only ſlightly corked, to allow any air which may be extricated, to eſcape. During the time of ſolution, the phial may be briſkly ſhook now and then, though I do not know whether this be abſolutely neceſſary; in leſs than three quarters of an hour the ſolution is compleat. When it cools, the bottle containing it, is again weighed, and as much of common water, or for the ſake of giving it colour, of ſp. lavend. is added, as was found to have evaporated during the proceſs to make up exactly the ſix ounces. By this means the doſe is more accurately calculated, a convenience which I conſider of ſome conſequence.

I HAVE

I HAVE diſtributed this ſolution to ſeveral practitioners in this neighbourhood, with directions for its uſe, in order to collect their practice, and form a concluſion from as large a number of trials as poſſible; in every inſtance, that have come to my knowledge ſince, it has proved ſucceſsful. The following I ſhall detail from the firſt of my own trials; and exactly as I find them in my notes.

CASE I.

GREEN, a ſoldier in the Queen's 2d regiment of Dragoon Guards, quartered in Ipſwich, aged 30, put himſelf under my care, Auguſt 7th. 1786, by the deſire of Mr. Hamilton, Surgeon to the regiment. His complaint was a *quartan*, under which he had laboured many months;---the fits are long and ſevere;---has taken pounds of bark; and often upwards of an ounce a day. By this means his fits were generally ſuſpended for a ſhort time; ſometimes he

has remained free from them for two or three weeks, but the diſeaſe always recurred. It occurred to me, to try arſenic, having lately, before, peruſed Dr. Fowler's reports, relative to this mineral.

As this was my firſt experiment, I made uſe of only one grain to the ounce of water, which I had diſtilled as directed by Dr. Fowler for the purpoſe; the bottle into which it was put was ſuſpended in a veſſel full of water, (as already deſcribed) and ſet on the fire to boil.---- When the arſenic was diſſolved, the ſolution, when cold, was weighed, and ſix ounce, the quantity I prepared, was found to have loſt three drams by evaporation; to ſupply this, 210 gutts of common water were added; I calculated this to be the quantity loſt, allowing 70 gutts to the dram; no allowance was made for any loſs the arſenic might have ſuſtained, judging it to be trifling. Aug. 8th. hor. 10. A. M. gave of this gutt. xxxv.---in a little common

common water---ordered it to be repeated at four, and at ten P. M.

Aug. 9th.—No inconveniency from the medicine; at nine this morning the ſame doſe, as yeſterday, repeated—at ſeven P. M. took a ſecond—the fit returned this day, and prevented his being regular in the time of taking his medicine:—two doſes, therefore, were only given this day: medicine cauſed no ſickneſs—his appetite, he thinks, rather impaired; the fit was ſhortened this time a full hour.

Aug. 10th.—This morning took forty gutts—and repeated it, to the third time, at the diſtance of ſix hours from each—no other inconveniencey than a ſlight degree of impaired appetite.

Aug. 11th.—Took the medicine, as yeſterday—without inconveniency—two hard ſtools to-day; to-morrow expects his fit about two P. M.

Aug. 12th.—Took gutt. 50—thrice to-day, and at ſix hours diſtance each—fit commenced an hour later—was not leſs ſe-

vere

vere than formerly.—The laſt doſe puked him a little, and he had ſeven ſtools.

Aug. 13th.—Omit the drops—let him have an emetic.

Aug. 15th.—This day had recourſe to the drops—took gutt. 50, thrice as before—did not make him ſick—fit returns to-day.

Aug. 16th.—Had little or no fit yeſterday—medicine did not make him ſick.

Aug. 17th.—Yeſterday no inconvenience from the drops—had four ſtools—appetite not impaired—to-day took gutt. 60—thrice.

Aug. 18th.—Yeſterday had only one ſtool—drops did not give unneaſineſs—this morning is a little indiſpoſed—or faintiſh—as he calls it—expects his fit to-day.

Aug. 19th.—Had no fit yeſterday—took his medicines—had only one ſtool—complains to-day of a ſlight pain acroſs the abdomen;—yet, augmented his medicine to-day to gutt. 65—with orders, that if the pain increaſed, he ſhould take only two doſes.

Aug.

Aug. 21ſt.—Yeſterday had no fit—medicine gave him three ſtools—no ſickneſs.

Septr. 3d.—Is compleatly cured.

I may add, he remained ſo for upwards of ſix months after, i. e. till the regiment marched to other quarters.

The reader will perceive, this cure took up twelve days, i. e. from 8th. to 20th. incluſive; for on the 21ſt. no medicine was given—and he began it on the 8th—the reaſon, perhaps, it did not yield ſooner, was owing to my cautious doſe; I thought it ſafer, as it was my firſt trial, to be rather under, than over in my doſe.

CASE II.

Samuel Thompson, aged 21.—A ſoldier in the ſame regiment—was ſoon after put under my care by Mr. Hamilton, ſeeing the ſucceſs I had with Green.—This was a quotidian of ſix weeks duration;—fits return daily between eleven and twelve.

—I

—I began with gutt. 35, of the ſame ſolution, of one grain to the ounce, and repeated it at the diſtance of ſix hours, to the third time. The day before I began with him he had an emetic, which operated well—report—yeſterday had his fit as uſual—medicine has had no ſenſible effect—this day to be repeated as yeſterday.

Finding it tedious to meaſure out ſo many gutts, I thought of preparing the medicine of double ſtrength, but was uncertain at this time whether I could diſſolve twograins in an ounce—on trial, however, I found no difficulty * ;—of this I began with gutt. xx. ter de die.

Morning report.—Had his fit yeſterday as uſual ; no ſtools from the medicine—today the medicine to be repeated to gutt. xxxv. ter.—each doſe, at the diſtance of ſix hours exactly.

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* I have diſſolved three grains to the ounce ſince this.

Morning

Morning report.—Yeſterday had three ſtools—fit returned an hour later—leſs ſevere—medicine griped him a little—but no other inconvenience—ordered the ſame to-day as yeſterday.

Morning report.—Had three ſtools yeſterday—miſſed his fit entirely—only about the hour of its former occurrence, felt a little anxiety—medicine griped him conſiderably—appetite impaired—ordered to intermit the medicine—two days now intervened without any—at the end of which—report—no fits ſince.—Repeated the medicine two days more—quantity as before—no fits—report two days afterwards—continues well—diſmiſſed cured.—In like manner he remained well till the regiment marched into different quarters.

I gave Mr. Hamilton ſome of the ſolution, requeſting him to try it, when opportunities offered.—Sometime afterwards he reported to me ſeveral caſes of its ſpeedy ſucceſs, both on the ſoldiers, and on a few

paupers in the town, whom he found labouring under intermittents.

CASE III.

JOHN GOULD, Esq. near this town, requested me a few weeks ago, to give advice to a poor man, called Hynd, at that time one of his labourers, at haymaking, whom he found one day in the meadow ill.—He had been afflicted with a quartan for several months—I gave him the solution, beginning with gutt. xxv—ter de die—two days after he had his fit—but not less severe—the medicine neither griped, nor gave him any uneasiness.—I encreased it now to gutt. xxx—ter de die:—The second fit was considerably shortened—no looseness, nor gripes.

Continued it at this dose some days longer—he escaped the third fit altogether—had two or three loose stools, and a slight pain across the abdomen—discontinued the drops for three days—at the end of which,

repeated

repeated them three days more—no return of the fits—diſmiſſed cured—with orders to return in a week, to report how he had been in the intervals—continues well *—Quartans are allowed to be the moſt obſtinate of all the kinds of intermittents—but this laſt yielded, in a ſhort time, to the medicine—perhaps, had I ventured on a larger doſe it would have yielded ſooner; but I think it ſafer, with ſo active a medicine, not to be too bold.

The medicine ſold under the name of Edwards's Taſteleſs Ague Drops—has certainly a much larger proportion of the arſenic, in a given quantity, than what I ventured to preſcribe.—As the doſe is only ſeven gutts—and yet the effects are ſometimes, it is ſaid, violent. The doſes are ordered to be repeated at the diſtance of nine hours.—It is but juſtice, to add, however, that a practitioner here, aſſures me, he has ad-

* Some weeks have now elapſed, without any return of his complaint.

miniſtered thoſe very drops, and he adds, uſed many a bottle of them,—for ſeveral years, in caſes of the intermittent kind, with perfect ſafety, and ſpeedy ſucceſs.—This ſurely ſpeaks greatly in favour of arſenic—for it is not now doubted that this is the mineral which gives activity to this noſtrum.

In the winter of 1781—and ſpring 1782—I had a ſoldier whoſe ague I was not able to overcome,—he had got bark, and other medicines, in uſe for the diſeaſe, till he was tired taking them.—He ſeldom was free more than a week.—Marching into Royſton, in the beginning of July, where the men were to remain a week or two; he was again taken ill.—I was adviſed to try the Taſteleſs Drops.—I had ſome reluctance to exhibit a medicine, the compoſition of which I was ignorant, but by the perſuaſion, chiefly, of his Captain, I complied. He took them only a few days, when his ague left him, and never returned afterwards, during the time I knew him, which

was

was more than a year.—Yet, I confeſs, this did not induce me to try the medicine, again, till I ſaw Doctor Fowler's reports.

It is needleſs to tire the reader with more caſes; the medicine, I am perſuaded, will be found on moſt occaſions, eſpecially in intermittents, a ſafe and efficacious cure, if adminiſtered with that care and circumſpection, which the regular practitioner is bound in duty to uſe with every active article of the materia medica;—nor ſhould it be the leaſt objection, that it is one of the moſt powerful poiſons with which we are acquainted; ſeveral other articles in daily practice are not leſs ſo; for inſtance, corroſive ſublimate.—Nay, it is ſubſtances of ſuch activity, that form the moſt uſeful part, of what are denominated articles of the materia medica, and by which we may hope for moſt ſucceſs in the cure of diſeaſes. This ought to be one ſtrong reaſon, however, for the employing of the regular faculty, and the ſuppreſſion of quackery.

With

With reſpect to arſenic, it has been tried in other diſeaſes, beſides intermittents, not without ſucceſs.—Mr. Hamilton, already mentioned, ſays, he cured a ſoldier of an epilepſy thereby, ſince the time I taught him to prepare it.—I tried it in a caſe of this kind, this ſpring (1787), for ſome weeks, but it was without ſucceſs.—It was, however, a caſe of long ſtanding, in which numberleſs medicines, by a variety of practitioners had been employed, at different times, for ſeveral years paſt.—A Surgeon, at Bury St. Edmund's, in this county, informed me, ſometime ago, he was trying it on an epileptic patient, and he had ſome reaſon to think, from what he had obſerved during the time he had adminiſtered it, that he would be ſucceſsful,—but I have not had an opportunity ſince of knowing the reſult of this trial; on the whole, it is the duty of every practitioner to repeat trials made by others, or make new ones himſelf, as he ſees opportunities, and as ſuggeſtions of this ſort occur

occur to him, and among theſe, it is no leſs the duty of the regimental Surgeon.

In the months of September and October, 1781, many of the ſoldiers were ſeized with the Typhus, as deſcribed by Profeſſor Cullen. The uſual ſymptoms, with depreſſion of ſpirits, and ſudden loſs of ſtrength, formed the diſeaſe. In ſome caſes the head was violently affected, in others, only a giddineſs, with but little pain, and alternate hot and cold fits of ſhort duration; but theſe were often ſo violent, at night eſpecially, that when the patients came to report themſelves ſick, and be put under my care, they deſcribed their complaints as a quotidian, or *one-day fever*, as they termed it; the ſtate of the pulſe was generally, ſomewhat, though for the moſt part, but little accelerated, and the conſtant thirſt and parched tongue that accompanied it, aſſiſted to point out the nature of the diſeaſe, and eaſily diſtinguiſhed it from an ague, where all the

ſymptoms

ſymptoms, in the intermiſſion, for the moſt part, vaniſh, and the patient appears as in health.

The ſeaſon proved very variable; one day rain, another clear and warm, but a hoar-froſt, which covered the ground frequently in the morning, rendered the air, as it diſſolved, cold and chilly, for a conſiderable part of the day. The regiment was but thinly clothed, the men not being permitted (for ſome reaſons, beſt known to the commanding officer) to wear their new clothes, before the beginning of December; theſe were the evident external cauſes of the fever; the irregularities of the men's way of living may be mentioned as occaſional and exciting cauſes. In theſe fevers, however, I always ſuſpect contagion, though I may not be able to trace it.

I found very few of theſe fevers that required the free uſe of the lancet; of this I am always ſparing, when there does not appear

appear to me abſolute need of it. For I have often found, where it is improperly uſed, that recovery is not only more doubtful, but the diſeaſe ſeems thereby protracted to a later period, by an encreaſe of debility. Some died, after lingering to the twenty-ſeventh day; but moſt of them recovered.

About this time a correſpondent ſent me from Edinburgh, a book intitled, a Phyſiological Diſquiſition, and Enquiry into the Principles and Common Practice in Fevers, in that city, wherein was recommended a practice founded on different principles from the common, taught by Dr. Brown. To confirm theſe new opinions, a numerous train of caſes were advanced, which had terminated happily by it; and contraſted with theſe, were ſeveral that had ended fatally by the old practice, in the Royal Infirmary of Edinburgh.

In this enquiry, publiſhed by Dr. Jones, much ingenuity of argument is uſed to induce the reader to diſbelieve all the diſtinctions of Noſologiſts, and to inculcate the opinion that all the genera, and ſpecies, &c. into which diſeaſes are divided, may be reduced to two alone, namely, thoſe from debility, or *aſthenia*, and thoſe ariſing from too high a degree of health, or *phlogoſis*. We are told, alſo, that the doctrine gained ground among the unprejudiced, and many of ſuch as were heretofore adherents to the Cullenian ſyſtem, which this oppoſed.

In the claſs of *aſthenic* diſeaſes, the cure conſiſts in ſtrengthening, and ſtimulating medicines, and the quickeſt of operation, and moſt *diffuſible*, to uſe the author's term, are to be preferred. Hence wine, brandy, opiates, and volatile alkali were given to a degree, never ventured on before, eſpecially opiates; and the change for the better, that almoſt inſtantly followed, were ſpoke of as inconteſtible facts,

facts, to prove the ſuperiority of the doctrine.

WILLING to find the truth as far as I was able, and not ſlaviſhly bound down to any man's opinion, or ſyſtem, as ſuch, I watched from this time, the firſt favourable opportunity to make trial of this doctrine, which promiſed ſuch advantages: out of ſix men, therefore, ill of the fever, already mentioned, I choſe one for the ſubject of the experiment, which appeared to me the beſt adapted for giving it the faireſt trial. It was one, where all the ſymptoms of debility were evidently marked, ſo that I could in no wiſe miſtake its *aſthenic* nature. It was, as near as I could find, the eleventh day of the fever; for ſoldiers are generally ſeveral days ill before they report themſelves in the ſick liſt, if they think they will be confined to the hoſpital, to which many of them have an averſion.

CASE.

BATES—of the General's company, with all the ſymptoms common in Typhus, head-ach, parched tongue, proſtration of ſtrength, reſtleſs nights, fluſhed cheeks, delirium, pulſe about 74 beats in a minute.

At eleven—A. M. a dram of ſp. C. C. to which were added gutt. xl. of Tinct. Theb.—in an hour after, pulſe roſe to 80. —The opiate did not induce ſleep. He roved violently as before.—The room was darkened, and all noiſe kept from him, as much as poſſible.

Viſited at four P. M. ſame day.—Pulſe now 76—and ſmall—delirium as before.—I ſhould mention, that he had ſlept little or none for ſeveral nights before this plan commenced, but was all this time delirious. The ſame repeated as at laſt viſit.—Here then were no leſs than ſp. C. C. dr. ij. —with T. Theb. gutt. lxxx. adminiſtered

in

in the ſpace of five hours.—But as this was trifling to the quantity recommended by Dr. Brown *, I could not call it a fair trial, if I ſtopped here, without purſuing his ſtimulating plan farther.

At half paſt ſeven—returned—this was three hours and an half from my laſt viſit—found him quiet, and was informed by the nurſe, he had been ſo for ſome time. On entering the room, however, he lifted up his eyes, which were heavy and red, and he began to talk wildly,—yet named me as ſoon as I came near.—Gave him now a tea-cup full of red port—pulſe 80.—At half paſt eight viſited again—gave another tea-cup of port—at ten, another cup of port, to which T. Theb g. xxv. were added—at twelve the ſame night viſited—another cup of wine was given —Here were no leſs than 105 gutts of T. Theb. in the ſpace of eleven hours.

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* Vid. Jones's Enquiry, already mentioned.

From

From this till eight next morning (Monday) he drank about ten ounces of beef tea—this was always given warm—his pulſe 84—tongue moiſt.—I began now to form ſome hopes of his recovery—yet he roved almoſt as much as formerly.—I went on further with the plan, and gave him gutt. lx. of T. Theb. in a cup of wine—took no more of the medicine this day—continued much the ſame.—Next morning at ten, A. M.—found his breaſt and ſhoulders full of maculæ—his pulſe 76—and ſeemed ſilly—turned up thewhite of his eyes a little—was, nevertheleſs, ſenſible when ſpoke to—called me by my name—complains of great ſickneſs—attempted while I ſtayed to make water, but could not—drank, ſince laſt night, a pint of beef tea—at one P. M. got a cup of wine.

Viſited an hour after, viz. at two, and found him quiet—at four, and gave him another cup of wine—at nine, and found him ſinging, when I entered, and talking fooliſhly—his teeth and lips furred over,

and

and black, with pulſe at 88—this was ten beats more frequent than in the morning.

As the delirium, which never abated, was now encreaſed, and he had got no opiate this day, I ventured on a larger doſe than I ever gave before, viz. T. Theb. gutt. lxxxviii.—Next morning viſited him at nine, and found him doſing—was informed by the nurſe, that he lay very quiet through the night. Pulſe now ſlow and equable—I thought him better on the whole—at eleven A. M. got another cup of wine.

I was willing now to intermit a while, and obſerve what the effects of this laſt doſe might be, ſo gave nothing more till next day at eleven, A. M. when I found him not only roving as uſual, but with ſubſultus tendinum—frequently convulſed, and pulſe very feeble and up to 108.—His death now appeared inevitable—got a cup of wine—ordered his head to be again ſhaved—for it had been ſhaved before—and a large bliſter to be applied over it. A gliſter was adminiſtered before the application

application of the bliſter—this gave him a ſtool—made water alſo.

While I was preſent he ſuddenly ſtarted out of bed, and I ordered him to be ſupported ſome minutes on his legs—delirium more encreaſed—eyes wild.—At eight P. M.—his pulſe 120—and weak—paſſed two large lumbrici—next morning found him more compoſed—gave him a cup of wine, and ordered him another at one o'clock.

The opiate was intermitted this night, and till next evening, when he got 105 gutts.—This was coming ſomething nearer to the *new practice* of Dr. Brown, though ſtill much ſhort of it.—For from the little ſucceſs it had hitherto afforded, I was afraid to proceed as far as this publication ſet forth.—The delirium had never abated.—From this till next evening he got no more, when 110 gutts were adminiſtered—with no better ſucceſs than before.—The day following I thought him better, though his pulſe was weak, and frequent.—Sometime after it was no leſs than 130.—He was ordered

dered wine and beef tea this day—but in the evening he died without a ſtruggle.

THIS, I am led to believe, will be allowed a pretty fair trial of the *diffuſible ſtimuli* applied in caſe of Tiphus. But whoever will take the trouble to examine it, will find no great encouragement to repeat the experiment. For my own part, I am inclined to think, I never ſhall make another on the ſame principles. Here, evidently, no advantage was obtained; nay, I am led to believe it was hurtful, though I dare not ſay the caſe would have proved more ſucceſsful, if it had been treated on a different plan.

PERHAPS, it will be ſaid, I was too timorous, and did not venture on large enough doſes; it may alſo be objected, that I omitted the uſe of Tonics.—Such as the Certex Peruv. &c. The reaſon was, I wiſhed to tread as near as I durſt in the footſteps of the father of this new doc-

trine, as ſet forth in ſome of the caſes, in the publication already quoted, by which it is endeavoured to be proved *the beſt practice yet found*. But I ſhall not take on me either to condemn, or approve,—here is a caſe, I lay before the public, pretty exactly narrated.—It may, no doubt, take many more trials by different practitioners, to ſettle the merits or demerits of this ſyſtem.

STORK extolled Cicuta to a degree, not yet deſerved, according to experience in theſe countries.—But the many trials made after him, though it could not be concluded that the medicine deſerved all the praiſe he beſtowed, have confirmed it to be an uſeful article of the mat. med. and one, from which we may promiſe ourſelves advantage in various diſeaſes. The ſame concluſion, perhaps, may be drawn from this medicine in fevers; it may teach us a more liberal uſe of opiates, without going ſo far as this new doctrine points out.

GRAHAM,

GRAHAM, the noted Quack taught us, that with ſafety, we might adminiſter Æther in much larger quantities than had ever been ventured on before; and the Suttons, by an extenſive practice, firſt brought the cool regimen in the inoculated ſmall pox into almoſt univerſal uſe. Though few of the Regulars ever adminiſter the former in ſuch quantities as Graham ſets forth he did; or purſue the ſtarving plan in the inoculation of the ſmall pox to the degree practiſed by the Suttons, ſeveral diſeaſes, no leſs fatal, having been the conſequence of it, yet both have been uſeful, eſpecially the latter; and with reſpect to the Brunonian ſyſtem, perhaps the ſame inference may be drawn.

LET us, however, keep in mind the pilot's advice, and endeavour, by a middle courſe, to gain the wiſhed for harbour, ſince death may be as equally certain from the Rocks of Scilly, as from the Gulph of Charybdis.

Ne incidamus in Scillam cupientes vitare Charybdin.

In caſes of extreme debility and danger, we find Dr. Heyſham adminiſtring large doſes of opium from gutt. xl. to gutt. l. united with vol. alk *. as a more inſtantaneous, and diffuſible ſtimulant, he ſays, than either brandy or wine, the former of which he gave in larger doſes than common, and the latter often to two bottles and an half in twenty-four hours, with the beſt effects. Many authors, from Sydenham to the preſent day, extoll its uſe in fevers, but none that I have peruſed, ever carried it to the length recommended

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* His formula is as follows.
R. Conf. Cardiac. gr. xv.—
Aq. Cinnam. ten. Semunc.
————— ſpirit dr. ij.
Sp. Lavend. compos. dr. j.—
T. Theb gutt. xl. vel.—gutt. l.—
Vol. alk. gutt. xxv.—M. f. hauſt. h. S. Sumendus.

b

by the author already mentioned, whoſe practice I attempted to repeat in the above caſe.

Professor Cullen, ſpeaks favourably of opium as a ſtimilus *, in fevers of the nervous kind, where the vis vitæ is apt to ſink.—He believes, wine and opium, act in ſome meaſure analogous to each other;—and he thinks it uſeful, particularly in every caſe of delirium from irritation; but that in an inflammatory ſtate of the brain it is hurtful.

Doctor Campbell, thinks it chiefly uſeful in the beginning of fevers.—But he ſays, "I have been informed, from authority on which I repoſe the greateſt confidence, that the exhibition of opium in larger doſes in the more advanced periods, and more dangerous ſtates of the diſeaſe,

* Vid. Lect. on Mat. Med.

has

has alſo been attended with happy effects. —To the amount of 120 drops at a doſe *. But having myſelf had no opportunity of ſeeing it ſucceſsfully given, under ſuch circumſtances, I ſhall decline ſpeaking upon that point."—As to its being a poiſon, he very properly adds, " I do not know that the ſmalleſt quantity capable of inducing death, has been aſcertained by experiment, or the largeſt that may be taken with impunity.—Much will depend on original idioſyncraſy, or peculiarity of conſtitution, which cannot always be known *a priore*; and upon the degree and nature of the morbid affection, at the period the opium is adminiſtered."—As one perſon will bear of ſpirituous liquors, or wine, without being affected, twice as much as others, ſo it is allowed to be the ſame with opium.—In caſes of mortification, in ſevere pain, locked jaw, or

* Vid. Treat. on Typhus.—p. 86.

Tetanus,

Tetanus, it may be given in ſuch large doſes, with advantage, as might poiſon a perſon in health.

Doleus tells us of a caſe, where only a ſcruple of Op. given in clyſter for a complaint in the bowels, brought on appoplexy, and death *,—and a poor woman, Dr. Campbell tells us, in his neighbourhood, in a conſumption, took two drams of T. Theb. by miſtake, at once, when comatoſe ſymptoms enſued, which terminated fatally in twenty-four hours.—The ſame author ſays;—" but even in ſtates of diſeaſe, where Op. is manifeſtly proper, an over doſe may be attended with the ſame bad conſequence as in other ſituations.—I have an unfortunate caſe in my eye, where an attempt was made to cure a violent convulſive diſorder by means of opium."

* Vid. Encyclopædia. p. 322.

" The

" The patient was a robuſt man, who was affected with ſevere and frequent twitchings: one day he took two grains of ſolid Op. which was repeated at the interval of two hours, and again at the end of other two hours, without any ſenſible effects. Six grains having produced no alteration when taken in this way, he took three grains the day following, at a doſe, and three more at the diſtance of an hour, without any perceptible conſequences. The ſucceeding day, the ſpaſms being more violent than ever, he took thirteen grains of the ſame medicine in the courſe of five hours, without the leaſt effect on his convulſions; nor did this quantity produce either ſleep, delirium, or thirſt.

" He was then ordered to take gutt. lx. of liquid laud. which was repeated four times at the interval of an hour between each doſe. This had no ſenſible effect in diminiſhing the ſpaſms, or affecting him in any other manner. The next day the doſe

was

was augmented to gutt. lxxx.—and repeated four times at the ſame intervals. He ſlept about an hour after taking the four doſes of laudanum, and then awoke, ſeemingly, in his uſual ſtate of health, the Op. having had no effect on his convulſions; he went to bed about ten o'clock; at twelve, the nurſe obſerved he was in a very profound ſleep, but did not attempt to awaken him; at ſix in the morning, ſhe found him ſtill in the ſame ſtate as before, and endeavouring to rouſe him found it impoſſible; every method was uſed for that purpoſe, that could be thought of, but in vain; he died about eight o'clock that morning.

On diſſection, an *Echymoſis* was found in his ſtomach; no other morbid appearance in the alimentary canal, nor in the brain.

"Here," he goes on, "Thirteen grains of Op. were given in the courſe of a few hours, without any bad conſequences. At another time 240 drops of Laud. which are

qual to about nine grains and an half of Op. alſo without any ſenſible effects; but, when on the ſucceeding day, the doſe was increaſed to 320 drops of Laud. which is equal to thirteen grains of Op. (a quantity that he had taken before in a ſolid form, with impunity) fatal conſequences ſeemed to follow the exhibition of the medicine; it muſt not, however, be ſuppreſſed, that a pint bottle was found in his bed, which contained ſome whiſky, and of which it is ſuppoſed he had drank."

THE moſt that I find Dr. Campbell adminiſter, was gutt. lx.—on ſome occaſions, he found it neceſſary to add 20 or 30 gutts. in two hours after—before he found it followed with reſt.

DOCTOR MARTIN WALL ſpeaks much in praiſe of opium alſo—yet I do not find he ever ventured to purſue it to any thing like the length the *new doctrine* ſets forth. A medical practitioner, about twelve miles from

from this place *, converſing lately with me on the ſubject, told me very freely, he had tried opium in this way, and was inclined to think he did hurt by it;—the quantity given, he did not mention; and from my own experience, in many trials, in ſmaller doſes; ſuch as from half a grain to a grain and half, in fevers, though it was often beneficial, and highly neceſſary, yet it was by no means univerſally followed with good effects in all caſes.—I have found ſeveral that it rendered reſtleſs, inſtead of producing ſleep,—and thirſty, and vapoured, who had better nights on leaving it off, than when they uſed it.

A MUCH ſimpler method of proceeding was ſucceſsful, lately in Edinburgh.—Out of one hundred and thirty children, in one of the charity hoſpitals in that city, eighty-five were ſeized with this fever; they

* Ipſwich.

were under the medical care of Mr. Kerr, —the firſt thing given was an emetic, and as ſoon as poſſible after been ſeized—the ſucceeding treatment conſiſted in *cleanlineſs* —the greateſt attention being paid to it in all its varieties;—freſh air, the apartments being almoſt conſtantly ventilated—belly kept open by ſimple laxative injections—diluents copiouſly employed, and ſometimes acidulated.—By this ſimple method, not one of the whole died; yet ſeveral had alarming ſymptoms—petechiæ, vibices,—and hæmorrhages.—The Matron of the hoſpital was ſeized with the fever; ſhe took an emetic as ſoon as ſhe found herſelf ill,—and without any thing more, that may be called medicine, ſhe alſo recovered in a ſhort time. From whence it would appear, as the Editor ſays, and to which I am inclined to ſubſcribe *," that in the treatment of fevers,

* Vid. Med. Comment. D. 2. v. 1.

practitioners

practitioners are as often apt to err by *doing too much*, as by *doing too little*."

THAT the pulſe was very ſlow, in the caſe, on which I made my experiment, is no uncommon thing in theſe fevers.—Dr. Campbell had one caſe where the patient died, covered with petechiæ, whoſe pulſe never roſe above ſixty-ſix ſtrokes in a minute.—A ſecond, who alſo died, where, till the day preceding her death, it never exceeded ſeventy-ſeven ſtrokes in the ſame ſpace,—and a third, whoſe pulſe beat no more than ſixty-eight in a minute—but in others, again, it is very greatly accelerated. —Pulſus, parvus, debilis, plerumque *frequens* are the words of Dr. Cullen, in his Definition of the Diſeaſe.—Nor is the heat of the ſkin always encreaſed.—Calor parum *auctus*—as the ſame Noſologiſt expreſſes it, —but the ſenſorii functiones *plurimum* turbatæ; and the vires *multum* imminutæ, are ſeldom found wanting.

To

To ſum up the whole; though I dare not ſubſcribe implicitly to the doctrine laid down, by ſuch as extoll very large doſes of this medicine, in febrile complaints; yet, if uſed with caution and proper circumſpection, a due regard being had to the particular conſtitution of the patient in bearing its uſe, much advantage may reaſonably be gained by opium; and we may likewiſe juſtly ſay of it, as the great Sydenham did, that, ſine illo, manca ſit, & claudicet medicina."

With reſpect to making experiments on the living ſubject, it may not, at all times, be expedient to diſcover our intention. There are few, who have not an averſion to become the ſubject of experiment, even though attended with the utmoſt ſafety and innocence; nor are we to ſatisfy, at the expence of much uneaſineſs, perhaps pain, and danger, fooliſh curioſity, where no inferences uſeful to ſcience can be drawn from it.

I REMEMBER, many years ago, a practitioner, who adminiſtered to a patient, no leſs than twelve grains of T. Emetic, merely to ſee what effect this *double doſe*, as he termed it, would have. The conſequence, as may be expected, proved very nearly fatal; for the patient was thereby thrown into violent convulſions; his hams drawn up with violent ſpaſms; and his life for ſeveral days, rendered extremely doubtful. The ſtory made ſome noiſe in the neighbourhood, and the blame was laid on a young man, then his aſſiſtant in the ſhop; but it muſt not be hid, that he was generous enough, afterwards, to remove the ſtigma from the innocent, where he ſaw it ſo unjuſtly placed, by avowing the fact.

WE come now to hazard our opinion, with regard to the exhibition of *doubtful medicines*. It has been long laid down as a medical maxim,—Melius dubium, quam nullum uti remidium,—or, that it is better

to

to have recourſe to a *doubtful remedy*, than to none.—But, perhaps, objections may be raiſed to the application of this precept in its utmoſt extent; becauſe to adhere to it, and act innocently, in our practice, on all occaſions, will require no ſmall ſhare of ſagacity.

If we are determined, however, to apply this *dubium remedium*, it ſhould, in my opinion, certainly be ſuch, as is calculated, if it does *no good*, to do *no harm*; and yet, if we have any hopes from its uſe, they muſt be founded on *certain qualities*, perhaps *active qualities*, we know it to poſſeſs; and a compariſon of theſe, with ſome *probable* or *certain* ſtate of the organs of the body, on which it is to have ſalutary effects.

In *doubtful caſes*, without acting in this circumſpect manner, we act *raſhly*; yet to reaſon thus by induction, though it be uſeful, can only lead to a degree of knowledge, and not to certainty, but it is a clue notwith-

notwithſtanding, that may be allowed occaſionally to guide us; a taper that *may* lead from a *doubtful* into a more direct, and certain path.—" Probabilities," ſays an author lately quoted, " are not to be deſpiſed, if they are drawn from experienced facts, to which we are led by the ſenſes; becauſe they are then to be eſtabliſhed as ſo many fundamental propoſitions. A medicine which has often been uſeful in a caſe, and in circumſtances ſimilar to theſe of the caſe before us, will *probably* be uſeful in this, but if I have not ſeen it tried in theſe caſes, my conjecture, will be mere *chimera*. We ought, therefore, on ſuch occaſions, to reaſon only from experience."

If we have recourſe to dangerous remedies, merely to learn their effects in caſes, where the patient, *in our opinion*, is paſt hopes of recovery, ſo that ſhould the worſt happen, we ſhall think ourſelves free from blame, we may err; for this muſt be founded in the truth of our prognoſtic.

That the wiſeſt are frequently deceived in theſe, is well known. This has, and may happen agreeably, ſometimes, contrary to our *prognoſtic*; and this incertitude, ſhould ever make us cautious in the exhibition of dangerous medicines, from an idea, that death appears inevitably approaching, and muſt take place.

We commune with ourſelves, perhaps, in this manner.—"It is in vain to be any longer ſolicitous reſpecting the fate of the patient; my ſkill, in medical ſcience, can prove of no uſe in his caſe; yet I have heard of certain complaints, ſeemingly ſimilar, where a certain medicine, when every thing elſe had failed, was ſucceſsfully exhibited. As all hopes are here at an end, I can have little heſitation of trying it; yet I am perfectly convinced of its doubtful, as well as dangerous effects. I know it may do miſchief; yet it may *chance* to do good here as in other caſes where it proved ſalutary; let things fall out as they may, ſince

ſince every other medicine I can think of has failed, where can be the harm in riſquing a trial? No one can blame me for killing a dying man." Such reaſoning, it is to be ſuppoſed, as this, before the qualities of James's powders, and their effects were fully diſcovered, was often uſed. They were often given as the laſt refuge in caſes of fever; and as often, not only at improper periods, in the exhauſted ſtate of the patient's ſtrength, when the diſeaſe had ſpun-out to ſeveral weeks, but in improper doſes; the conſequence was, they killed many, though they cured ſome. The caſes that terminated happily were publicly mentioned, while thoſe that ended fatally, were looked on to be occaſioned not by the medicine, but by the diſeaſe. Theſe abuſes, ſince the compoſition, and qualities of this medicine have been better underſtood, are now corrected; perhaps much more good, and certainly leſs miſchief reſults at preſent from their exhibition in the hands of judicious men than formerly.

With reſpect to the above reaſoning it is ſpecious; but I think it in ſome meaſure wrong; firſt, the prognoſtic we have made, may be ill-founded; for while life remains, there always remains ſome room for hopes, becauſe many of the operations of nature lie ſo far beyond our reach, that even the greateſt penetration cannot fathom them. What then can common abilities, and ſuperficial obſervation avail? We know from the experience of ages, that the efforts of nature, which in the end turn out ſalutary, appear dangerous in the eyes, even, of the wiſe; and in reality they are ſo; ſince it is frequently found neceſſary to attempt to moderate them.

If on occaſions of this kind, a leſs attentive obſerver, or a practitioner of leſs experience, from too haſty concluſions, gives up his patient, he acts worſe than a coward; at leaſt he diſcovers a degree of timidity allied to ignorance. And ſhould he now raſhly, and without the advice of other

other medical men, and the concurrence of the patient's friends, if they be convenient, adminiſter a medicine of the nature of which he is altogether unacquainted, or, of which, from probable reaſoning, he cannot conclude favourably, he is wrong, and ſhould beware of the conſequences.

In ſituations of this ſort, I ſhould eſteem it both more ſafe, and not leſs conſcientious, to truſt the caſe, in a great meaſure, to nature alone, than make hazardous attempts. Let our care now be directed to what are called the *non-naturals*; to ſleep; urine; ſtools; food; drink; perſpiration, &c. and ſuffer nature to perform the reſt. I can eaſily conceive more danger from being too *buſy* with medicines of the more active kind, than from none at all; and, as has been ſaid on another occaſion, it is ſafer to do too little, than too much.

"THE particular nature of diſeaſes is frequently ſo obſcure, that the utmoſt ſagacity cannot diſcover it; and, in ſuch caſes, it is evident, that it is at leaſt an even chance that medicines of any power may injure rather than benefit the patient; in ſuch a ſtate of uncertainty, it will certainly be prudent to give, in the form of medicine, what cannot produce any eſſential change; and in the mean time remark very accurately, the effects of diet, which will often afford the ſafeſt clue to the *general* nature of the diſeaſe; and which being aſcertained, we ſhall have advanced one ſtep nearer to a knowledge of its particular nature *."

BUT while we advance this opinion, it is not meant to inculcate indolence, or inactivity, or to deter from rational experiment; the laſt I would encourage.

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* Med. Cautions. Ed. 2d. p. 305.

WE

We have the example of eminent men, both in and out of the army to follow here. It was in the army Sir John Pringle, Profeſſor Home, Dr. Brockleſby, with many others, made uſeful experiments, and laid the foundation of a practice which ſtill continues.

It is, however, in ſuch ſtates of uncertainty, as already deſcribed, that it behoveth us to call others to our aid. Some others of the faculty ſhould be now conſulted; it will be for the attending practitioner's credit to do this: it is preferable to the precipitate uſe of this *doubtful* and dangerous remedy. Our prognoſtic, though formed with every poſſible care on our part, may be erroneous, and we ſhould act with caution.

"It is a curious fact," ſays Dr. Adair*; "that though it might be reaſonably ex-

* Philoſ. and Med. Sketch of the Nat. Hiſt. of the Human Body and Mind, p. 25.

pected,

pected, that conſiderable injuries of the brain muſt always be followed by great weakneſs, or total abolition of ſenſe or motion; yet in ſome caſes neither has been affected, and the patients have ſurvived after wounds and impoſthumations of this delicate organ, and in one inſtance after half of the brain was deſtroyed.—A caution againſt *precipitate prognoſtic* even in the worſt poſſible caſes."

As an inſtance of the little reliance, ſometimes to be placed in prognoſtic, and to point out their fallacy, we may mention one in the caſe of the once celebrated Mr. Pultney, as related by Biſhop Newton. "This gentleman," the Rev. Biſhop tells us, "lay ill of a pleuritic fever, once at Lord Chetwynd's, in Ingeſtree, in Staffordſhire. He was attended by Drs. Hope, Swynden, and other phyſicians, from Staffordſhire, Litchfield, and Derby; by Dr. Friend, from London, and Dr. Broxholme, from Oxford.

"THESE two laſt mentioned gave him over on their arrival, finding, as they thought, the caſe deſperate; he was ſtill alive, and was heard to mutter in a low voice, *ſmall beer! ſmall beer!* They deſired that this or any thing elſe might be given him. Accordingly, a great ſilver cup was brought, which contained two quarts of ſmall beer; they ordered an orange to be ſqueezed into it, and gave it to him; he drank the whole at a draught, and called for another; another was given him; and ſoon after drinking that, he fell into a ſleep, and a moſt profuſe ſweat, for near twenty-four hours. From that time he recovered, and ſo ſpeedy was his recovery, that in a few days his phyſician thought it unneceſſary to attend him longer *."

I SHALL now venture to relate a caſe wherein I was agreeably diſappointed in my prog-

* Biſhop Newton's Works.

noſtic, in the ſpring of 1782; though I thought myſelf ſufficiently warranted, from the ſymptoms, to pronounce then as I did. The patient was in the ſeventeenth or eighteenth day of a Typhus, as far as I could learn, for it is difficult to find the exact commencement of theſe fevers, as we are neither called early, nor can the patient be diſtinct in his account; every attention in my power was paid from my firſt viſit; all the ſymptoms carefully noted, and the changes that took place as diligently watched; the bark had been adminiſtered, and likewiſe wine in good quantity, more than commonly falls to the ſhare of regimental patients. I had likewiſe tried calomel joined with camphor, in the manner preſcribed by Lyſon in fevers; with many other remedies, all with a view to raiſe the vis vitæ. My patient's ſtrength was hourly ſinking, and for two days his life appeared doubtful; but I had as yet been cautious in publickly giving my opinion of the event, though often interrogated

rogated on this point, a precaution which every medical man ſhould take. In the evening I viſited him, and things appeared much againſt him; yet I ſtill heſitated in declaring my opinion. Next morning I viſited again, but on entering his room, there was ſo evident a change for the worſe, that my heſitation was now at an end; the event appeared too plain, I thought, to be concealed even from the by-ſtanders. The report I received of his night's reſt, and above all, the appearance of his look prognoſticated a ſpeedy diſſolution; his countenance was ſunk, and death already ſeemed to ſit on each eye-lid; the corners of his mouth were fallen, a ſymptom I had often noted to portend ſpeedy death; his urine and excrement paſſed involuntarily; he had a ſubſultus tendinum; his pulſe ſo feeble and weak as ſcarcely to be felt, and a conſtant picking at the bed-clothes. I forbore now to preſcribe, and only admoniſhed the orderly (this happened in a billet) to give him now and then a little drink; I left the houſe, therefore, with

orders to let me know the time of his death, for I had no doubt remaining reſpecting it. Having heard nothing more of him, I viſited next morning, and, to my agreeable ſurpriſe, found every deadly ſymptom changed for the contrary; he was ſitting up in bed, and the orderly feeding him with panada.

The unfavourable appearances continued, they told me, for ſome hours, while they expected every deep ſigh he fetched would be his laſt; but he ſunk, after this great ſtruggle, into a profound ſleep of ſeven hours, and awoke, refreſhed, ſenſible, and changed in the manner I ſaw him. He ſoon recovered, ſo well, as to render my attention needleſs; but I freely confeſs, I was more obliged to nature for her timely interference, than to any thing I was able to do for the patient. I doubt not but many others have been ſimilarly circumſtanced; and hence it is, that prognoſtics, in my opinion, ſhould be made

made with caution, and relied on with doubt.

" A PHYSICIAN," ſays Zimmerman, " who goes ſo far as to predict what is to happen, can, on many occaſions, ſay only, that it is *probable* ſuch an event will take place; ſometimes, however, it is impoſſible to foreſee this *probability*. The probability of a prediction is founded on the effects that have been obſerved in ſimilar caſes; theſe effects are, therefore to regulate the conduct of the obſerver."

HYPOCRATES himſelf was aware of the great difficulty of forming a probable prognoſtic; and though he had all the obſervations made by the family of Eſculapius to aſſiſt him, he readily acknowledged it, and does not heſitate to declare, that it is very eaſy to be deceived. " The " prognoſtic, in acute diſeaſes," ſays he, " is *uncertain*, and it is impoſſible to ſay " *infallibly*, whether the diſorder will ter- " minate in death or in recovery."

CHAP.

CHAP. XIV.

Of the Mate's Qualifications.

EVERY regiment has a Surgeon's Mate, or an Aſſiſtant Surgeon, whoſe duty is equally the ſame with that of the Surgeon. It frequently happens that the whole buſineſs devolves on him, the Surgeon making only occaſional viſits to the ſick; it would appear from this, that his qualifications in medicine ought to be equal. The military laws, however, place him in ſubordination to the Surgeon.

IF the regiment be ſeparated into different diviſions, and placed in ſcattered quarters; the mate is ſet over ſome of theſe, while the Surgeon remains at head-quarters, a compliment paid to him, and ſuperintends the

the party that remains there, and near it. As the Surgeon receives the medicine-money, he is to ſupply the Mate with every article he ſtands in need of in this way.

It is clear, from this, that if he is not regularly ſupplied with medicines, his viſits and preſcriptions can anſwer little purpoſe to the afflicted whom he is to attend. Deficiencies have been obſerved in this point; it is then the Mate will find his ſituation aukward, if he has any regard for the welfare of the men; for the general rule with many regimental Surgeons is, to ſave as much from the money allotted for medicines as they can, ſince their perquiſites muſt be in proportion. Yet, as we have already ſaid, the fault is not altogether to be placed to their account, but to the bad eſtabliſhment that limits their pay to a ſum inadequate to their neceſſary expences.

This,

This, however, not only injures the men, but often gives riſe to diſcontent and animoſity between the Surgeon and the Mate. For if the latter is active in diſcharging his duty, the former never fails to *admoniſh* him to beware of expence in medicines. If the Mate be poſſeſſed of any medical diſcernment, this cuts off all opportunities of diſplaying it. Though we ſaid above, that the qualifications of both ought to be equal, yet under this reſtraint, it becomes a matter of little moment how he is qualified; for ſhould the firſt profeſſor, in the moſt celebrated univerſity, be placed in ſuch a ſituation, ſurely his knowledge would be of little avail; ſince, under theſe circumſtances, it is out of his power to execute what his diſcernment dictates.

An architect may plan a building with every degree of judgment and taſte, but if he is deprived of workmen to execute his deſign, the ſtructure can never be raiſed.

It

It is altogether the ſame in medicine, ſhould the preſcriber be with-held from the means of compoſing his preſcriptions; if Mates, under theſe circumſtances, poſſeſs any medical knowledge, they become diſguſted, and lament the unfortunate and *ignoble* ſtation they hold, which prevents them from being of that uſe to their patients, which they otherwiſe might prove; if this, with other things, does not determine many to quit a ſervice they cannot remain in with honour or ſatisfaction, they become careleſs and indolent; and obſerving that their greateſt efforts to merit attention, and their moſt diligent application to their profeſſion, can neither attract reſpect nor notice, they no longer take pains to obtain it; their ardor by this behaviour cools, and they now become as indifferent to what happens in the line of regimental practice, as they obſerve their predeceſſors have been, till by degrees this indifference ſettles into a habit; and they looſe all reliſh whatever for the

profeſſion, finding the labours requiſite for it ſo ill rewarded.

ALTHOUGH it would appear from the foregoing, that almoſt any perſon may be a Surgeon's Mate, yet it were better, that care was paid to their choice, ſince every one, who is Mate, may in time, by intereſt, or ſome lucky chance, be Surgeon; for admitting, little now be in their power, yet when they commence Surgeons, their authority commences with the ſtation. But will they be fit for the duty they muſt now undertake? It is not to be expeced, that the improvements they have gained under ſuch reſtrictions as we have pointed out, can have added much to their experience, ſhould they have been Mates even for twenty years; and if they entered novices, inſignificant viſits to the ſick, where they neither did, nor obſerved any thing material, and the wearing a cockade a number of years, can ſurely add but little to the general ſtock of their knowledge; for it

is

is not to be ſuppoſed that knowledge will come intuitively, or be like their pay, the conſequence of their promotion. How far the poet's opinion may be juſt in many things, when he ſays,

> " A buſineſs with an income at its heels,
> " Furniſhes always oil for its own wheels *."

cannot ſurely be admitted in caſes of this nature, if by oil, he means capacity for buſineſs. The parchment on which their commiſſions are written, cannot convey medical ſkill, or teach them how to make obſervations. Accurate obſervations ſo neceſſary to be made in phyſick, are not to be expected from ſuch men.

THE learned Zimmerman ſays, " to *ſee*, is not to *obſerve*; and the hoary veteran, who has looked for ages on the complicated

* Vid. Cowper's Poems. V. I. p. 289.

ills to which human nature is ſubject, may at laſt be uninformed, and unworthy of confidence. But the world thinks differently. With it, to be young, is to be *ignorant*; and to be old, *ſagacious*.

"JUDGEMENT is ſtill more rare; it unfortunately requires erudition, reflection, and attention; it is not attained in the ſplendid circles of gaiety and diſſipation; it is not the attendant of the coffee-houſe, or tea-table;"—But ſuch is the life too often of Surgeons and Mates, becauſe ſuch is the life of the army. The manners and cuſtoms in uſe there, rendering it almoſt unavoidable;—nay, ſuch is the conduct, too often, of medical men out of the army. He proceeds farther in his obſervations on this ſubject, which though they be applied to *Phyſicians* in general, will, we think, equally apply here—"theſe, however, are the ſchools of modern improvement; and while the young Phyſician aims at being agreeable, he looſes the opportunity of becoming

coming uſeful. In this caſe, mankind combine againſt themſelves; the Phyſician acts only on the defenſive."

GALEN complains feelingly of many practitioners of his day, who were not aſhamed to attend in the morning at the toilet, and make their court to the ladies, and at night to be of the moſt ſumptuous parties; in this manner, by modelling themſelves to every faſhion, they aimed at eſtabliſhing a reputation; and this is the reaſon, ſays this reſpectable man, why the fine arts, and philoſophy, are conſidered as very uſeleſs branches of a Phyſician's knowledge. "Ought we then to be ſurprized," to uſe the words of Zimmerman, "that ignorant mechanics ſhould quit their trades for the ſake of practiſing phyſic; or that perſons, who have learned only the art of preparing medicines, ſhould have the boldneſs to conſider themſelves as phyſicians, and undertake the treatment of diſeaſes?" —Pliny has very well obſerved, that he who has

has *impudence* may very well paſs for a Phyſician—and the obſervation, though ſome centuries old, is ſufficiently applicable at the preſent day; the conduct of our modern Empyrics will confirm it; and ſince I have touched on the ſubject, give me leave, though it may ſeem a little out of place, juſt to add the ſentiments of this author, relative to the tolerating quacks. —After inveighing againſt them in pointed terms, he adds, " Is it not ſtrange that the *State* ſhould ſuffer this deſtructive breed;—ſurely the people, blind and ignorant as they are, ought not to be abandoned to the prey of theſe *impudent* and *dangerous* men. If ſociety claims a right to oppoſe the deſigns of any individual, who wiſhes to render himſelf unhappy, why ſhould not he preſerve the ſame privilege, when the ſafety of a great number of her members becomes concerned? If ſociety has ſuch a right, ſhe is ſurely blameable for not exerciſing it. The Sovereign will always be diſpoſed to encline a favourable ear to repre-

repreſentations which may be made to him on the ſubject. The Colleges of Phyſicians ought therefore to unite in the reformation of theſe abuſes."

With reſpect to want of erudition, he delivers his opinion in the following words:—"The views of the inattentive practitioner are vague and uncertain, but the reſults of attentive obſervation, founded on a knowledge of human nature, with a juſt degree of erudition, are very different. Theſe lead to uſeful concluſions: the others are like caſtles in the air, they vaniſh into nothing *."

Many, likewiſe, of the regimental practitioners, both Surgeons and Mates, remain almoſt totally ignorant of what is paſſing in the medical world; their acquaintance and connections in it being

* Vid. Treatiſe on Experience in Medicine.

either

either none, or very little. Their want of books contributes to this; for granting they have a taſte for peruſing them, they ſeldom poſſeſs any. "He who never reads," ſays the ſame author already quoted, "ſees in the world only himſelf; he has no idea of what has been thought by others; he conſiders all his own reflections, as of the greateſt importance."—All theſe things conſpire to with-hold them from improvement, and cut off their communication with men of letters; but we have touched on this ſubject in a former chapter.

THOUGH this complaint againſt regimental practice, may have, in ſome degree, ceaſed within theſe laſt twenty years; and though many may be now found in both capacities of Surgeon and Mate, whoſe abilities *ought* to command them reſpect; yet we may venture to ſay, without overſtepping truth, that ſeveral have found their way into it who deſerve all the ſeverity of this

this remark. Nor can much amendment be expected, till better regulations take place here, which I apprehend is not to be done without holding forth proper encouragement to men of regular education, to induce them firſt to enter into, and then to continue in the ſervice.

DURST I venture to propoſe any plan, it would be ſomething to the following purpoſe; that Surgeons Mates, if they continued in the army, ought, previous to admiſſion, to be ſtrictly examined at Surgeon's Hall, reſpecting their knowledge in ſurgery; and afterwards by a Committee of Phyſicians, appointed for that purpoſe, relative to their abilities in what is more properly called Practical Medicine; and to the privileges of undergoing theſe trials they ought not to be admitted, till after a certain number of years ſpent at a Medical Univerſity, or ſome other reputable Medical School, from which they are to produce certificates of their attendance, in the ſame manner as a

Candidate for a degree in medicine, before his admiſſion to examinations.

Brocklesby, who is well acquainted with army practice, is confident, "That "all future examinations of perſons em- "ployed as Mates, or practitioners, in the "army, ſhould be ſolely ſubmitted to ſome "one of the Cenſors of the College of Phy- "ſicians, together with any one of the "army Phyſicians, conjointly, who know "the requiſites for the poſt, for which "they ſtand candidates."

To alter the mode of examination at Surgeon's-Hall, he thinks, is indiſpenſibly neceſſary for the benefit of the public ſervice. Though he has laid this before the public, ſo long ago as upwards of twenty years, in which time we have ſtruggled with another long war, things remain in this depart- ment juſt as they were, without one ſtep of improvement attained. It is not to be expected that regulations of this nature can be

be attended to in time of war, when the public attention is drawn forcibly to different points. In ſuch times even the progreſs of the arts is ſtopped; in times of peace we may be led to expect more; errors might then be rectified, and regulations formed to prevent them in future. There are few departments in the ſtate where they are more wanted than in the medical; and in time of war few departments on which the ſucceſs of our armies may more depend.

SOMETHING like the plan propoſed above is followed in paſſing medical practitioners for the navy; after they paſs an examination at Surgeon's Hall, they are ſent to a Phyſician appointed for this end, to be examined in medicine. When it is conſidered how much regimental practice partakes of the Phyſician's province, the propriety of this will appear evident. Brockleſby ſays, touching on this ſubject, in his œconomical obſervations, " I can-

not admit that any one of the beſt of them, (Surgeons) although their knowledge may be ſufficient in their own profeſſion, or even any Court of examining Surgeons, at the Hall, are competent judges of medical ſubjects, ſufficient to aſcertain what are the requiſite phyſical qualifications of men who preſume to ſuperintend the lives and health of nine hundred ſoldiers*."—This, it ſeems, was the compliment of a regiment when he practiſed in the army.

In giving ſuch certificates, private teachers for their own ſakesſhould be cautious; they ought not to be allowed where the requiſites are wanting: ſome grant theſe with too great facility; they have been given where the bearer's attendance was neither regular nor conſtant, and without any examination whatever. They have been found, however, to anſwer the purpoſe equally as

* Vid. Œcon. Obſ. &c. 1764.

well

well as an univerſity diploma, or certificates from Surgeon's Hall.

For the better encouragement of men liberally educated, more pay ſhould be allowed. May we not, with propriety aſk, who would give himſelf the trouble, and run into the expence neceſſary for ſuch an education, for the poor pittance of three ſhillings a day? To live on this ſmall ſtipend, when their neceſſary expences are conſidered, is barely to exiſt.

	l.	*s.*	*d.*
Mate's full pay, at 3s. 6d. a day*, for 365 days, is	63	17	6
Subſiſtence iſſued at 3s. per day, is	54	15	0
Poundage ſtopped by government, 1s. per £. is	3	3	10½
Chelſea Hoſpital, one day's full pay, is —	0	3	6
Warrants and contingencies, two days pay is —	0	7	0
Agency, 2d. per £. is	0	10	7½
	59	0	0
Remains of 365 days, or one year's arrears at 6d. per day, is	4	17	6
	63	17	6

* A Surgeon's pay is 4s.

Or,

Or, he looſes of his full pay, every year, no leſs than 4*l*. 5*s*. 6*d*.—while the annual arrears, or neat clearings, viz. 4*l*. 17*s*. 6*d*. are ſo irregularly paid, that it may be ſaid, likewiſe, to be almoſt loſt. The warrant and contingencies are an impoſition of the agents, or their clerks; government never conſented to them—an order has been lately made to prevent their being exacted, but it has not yet been enforced.

ANOTHER part of the regulations that might be found neceſſary is, that no ſubordination ſhould exiſt between the Surgeon and Mate. Subordination, here, is found to be productive of jealouſy, which if it does not injure the practice, at leaſt makes the parties unhappy. What could firſt induce government to inſtitute ſubordination between the Surgeon and his Mate, unleſs the latter was to be held in the light of an Apprentice to the former? but we ſhall ſuppoſe him of equal qualifications; for if he is what he ought to be, he muſt poſſeſs equal

equal medical knowledge. Is ſuch a perſon to be treated as an apprentice boy; and as it were implicitly obliged to obey the dictates of one only his equal in point of medical erudition? nay, he may be far his ſuperior in this reſpect; for, though it has been mentioned as a doubt, whether many regularly educated, enter the regimental ſervice in the ſtation of either Surgeon or Mate; yet, there are, moſt certainly, ſome in both; but it does not always happen that two ſuch are appointed to the ſame regiment. Where the weaker, the leſs qualified, chances to command, it is always an injury to the ſervice, and a reproach on the ill-formed regulation.

SEVERAL young men, of good education, have entered as Mates, in the late war eſpecially, both in the militia and marching regiments, through the laudable deſire of falling into immediate practice, and obtaining ſpeedy experience; moſt of them ſoon found, however, they were diſappointed in a great meaſure,

ſure, by means of this ſubordination. But it is the fault of the military laws that permit this, not the fault of the officers *.

OUGHT ſubordination to take place in the medical, becauſe it was found neceſſary in the other orders of the military? Is it not to be regretted then, that there are in the army men of education, yet the ſervice ſo little the better for them, and which always

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* I could mention ſeveral of promiſing abilities, that went into the army, in the late war, both regularly educated Phyſicians, and Surgeons. Of theſe, two Surgeons have been fortunate enough to get appointments as regimental Surgeons. Of four others, all Phyſicians from the firſt Medical School in Europe, one only has the appointment of Surgeon. The others were, and are Mates, (1783.) It is not our buſineſs to ſay what are the abilities of thoſe under whom they act. Some of the above, finding themſelves miſtaken in the choice they made, ſoon retired from a ſervice they could not remain in with credit to themſelves, or uſefulneſs to their fellow creatures.

muſt

muſt be the caſe, as long as they have not the regulation of affairs. If regimental Surgeons ſet up for teachers, ſubordination is allowable. Boys may then be put under their tuition, as they are under that of other maſters, for a certain term, till they be ſuppoſed properly inſtructed in regimental practice.

But where they have already received a good education, is it treating them fair to ſet a maſter over them, for no purpoſe whatever, but that of humiliation? Surely it is humiliating enough, that their pay is leſs than the Surgeon's, who has been more fortunate, without, perhaps, poſſeſſing more merit.

In hoſpitals, out of the army, where two or more medical practitioners are appointed conjointly, it is not with this invidious diſtinction. They are denominated *Colleagues*, and no ſubordination ſubſiſts be-

tween them *. They conſult together; they deliver their opinions freely, ſupported by reaſoning; and by this each is actuated. It is very different in the army, where a Mate *often* receives his *Orders*, as a ſervant does from his maſter, or as a ſerjeant from his officer. There is no room for remonſtrance, if the Surgeon chuſes to inſiſt on it; he may even be compelled to do what his judgment points out to be wrong. Under theſe circumſtances, obſervation and judgment muſt yield to ſtupidity or raſhneſs. For it does not always happen that the other may be inclined to liſten to the reaſoning of his Mate, in matters wherein they differ in judgment.

There is a ſort of pride, but it is of a very cenſurable kind, in inſiſting on our

* The term ſenior and junior Phyſicians, &c. to an hoſpital, does not imply that the one is obliged to obey the *orders* of the *other*, nor gives any other than mere nominal diſtinctions.

opinion,

opinion, becauſe it is ſuch, when there are evident reaſons why it ſhould be yielded: but this is a fault too often found among all orders; and we may pretty nearly coincide with Pope, when he ſays, that,

"'Tis with our judgments as our watches, none
"Go juſt alike, yet each believes his own."

but inſtead of this obſtinacy of opinion, where it unluckily happens, they ought to meet, conſult together, and reaſon on doubtful points, as is practiſed out of the army; this, however, can never happen with the ſame cheerfulneſs, where an equality does not exiſt. If complaiſance in a Surgeon, or perhaps ſenſe of his inferiority, bids him act towards the Mate otherwiſe, it is to be placed to his own benevolence of diſpoſition, and a wiſh for the welfare of the patients; but the laws of the army give him power to act very differently.

MATES labour under other hardſhips as well as theſe, which muſt ever prevent

men of much knowledge from holding the office; i. e. the length of time they may remain in this ſituation without farther promotion. Inſtances have occurred, where a man has been Surgeon's Mate in a marching regiment fifteen years; others ten; others eleven; and even then, when vacancies happened, they have found novices both in years and knowledge, ſet over their heads. This is bad, but it will ſtill appear worſe, when it is conſidered, that they may ſpend twice the number in it, and be at laſt diſmiſſed without any thing to ſupport them in their old age.

The caſe is different with the Surgeon; if his ſervice was even leſs than a year, nay, perhaps leſs than a week, provided the regiment he ſerved in be reduced, he is entitled to half pay *; the Mate is

* I ſpeak of the Regulars. Militia Surgeons receive no half pay—ſeveral inſtances of this kind occurred at the

left to provide for himſelf or ſtarve. Would it not appear more equitable to place him on the ſame footing with the Surgeon, allowing him alſo half pay? When a private ſoldier ſerves twenty-three years he is entitled to his diſcharge, and is allowed a ſmall penſion. It ſeems but reaſonable that ſome proviſion ſhould be made for Surgeons Mates.

But though theſe inconveniences are great, they are not all they lie under; they are ſtill ſubject to a farther humiliating circumſtance; i. e. being liable to confine-

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the late reduction, on the cloſe of the war. I am happy to find an acquaintance, and worthy young man, among this fortunate number: though I have the mortification to find more than one, no leſs deſerving; nay, even Phyſicians, who ſerved moſt of the war, as Mates, diſmiſſed like a private ſoldier, without a penny; and the ſame would have been the caſe, had they ſerved in this ſtation the greater part of their lives. He is the only officer in the corps that is thus ill rewarded for his labours.

ment

ment in the ſame ignominious manner as a *private*, and this even at the pleaſure and caprice of the youngeſt Enſign of the corps. Let us now ſuppoſe an example, and obſerve how it appears: ſuppoſe then a man, ſuch as deſcribed above, reſpectable for his knowledge, perhaps venerable for his age, ſerving as Mate in the army: let us likewiſe ſuppoſe a boy, as frivolous as he is young, and as ignorant as he is frivolous, juſt taken from a writing ſchool, and entered into the ſervice; a trifling diſpute may ariſe between them; the Mate, without more ceremony, if he ſeems to reſent, is threatened with the *Black-Hole*; nay, he is in reality by the military laws, liable to be tried by a Court-martial, and flogged like one of the ſoldiers, under the idea of *inſolence to an officer*; and this merely, becauſe his warrant, inſtead of being ſigned by a Commander in Chief, or Secretary at War, &c. like the Officers and Surgeons, is only granted him, and ſigned by the Colonel of the regiment.

'Tis

'Tis true, this law is ſeldom put in execution; the gentlemen of the army are aſhamed of it; and I doubt not but he muſt be a great delinquent, whom they would ſuffer to be treated with ſuch ignominy; yet as the minds of men are variable, and as diſputes may take place, there is a *poſſibility* of its happening ſome time or other. I have heard it often mentioned in jeſt, which was ſtill reminding the Mate, of the law that hung *in terrorem* over him; and once I knew it threatened (not indeed executed) in good earneſt. A repeal of a law ſo unjuſt, ſo abſurd, ought ſurely without loſs of time, to take place.

It may be objected, that if the Mate's warrant was ſigned in like manner as the officers, it would infringe the privileges of the Colonel. I deny this; for the Colonel, as now, may have the nomination, (proper certificates of the candidates qualifications being produced) and may ſignify it to the War-

War-office, or Commander in Chief. We have a ſimilar example in the appointment of the Adjutant: the Colonel has authority to appoint his Adjutant; but the commiſſion is ſigned by a ſuperior power.

By ſome ſuch means as theſe, regimental practice would become more reſpectable; and men of reputation would not, as now, think it beneath them to accept the office, either of Surgeon or Mate; nor would they leave it as ſoon as they underſtood the nature of ſuch ill contrived laws. The ſick ſoldier would be more advantageouſly attended, and the ſervice in general better conducted.

CHAP.

CHAP. XV.

Surgeons Mates unneceſſary; and the Propriety of augmenting the Surgeons Pay.

THOUGH I have taken ſome notice of the qualifications neceſſary for Mates, and ſuch as they undoubtedly ought to poſſeſs, if they are continued in the army, yet I am perſuaded the office is ſuperfluous. It has already been ſhown, that a regiment of foot, of the late eſtabliſhment, when compleat, was only 746, non-commiſſioned officers included; and of theſe two companies, called additionals, are always on the recruiting ſervice; and never with the regiment either at home or abroad, and of courſe never in the number of the ſick. We have, likewiſe,

pointed out the number of ſick that, at an average, may be expected to require daily aſſiſtance. We know that it is not the number, but the diſtance our patients are placed one from another, that conſtitutes the fatigue of the profeſſion.

AMONG the number of the ſick we always find men that, properly ſpeaking, have no right to be returned to the Surgeon. Parties are frequently ſent out on different *Commands*; ſome after deſerters, and ſome on other duty. On returning, they are generally put into the ſick liſt on account of bliſtered feet, or, perhaps, for the ſake of reſting a day or two; ſometimes they want ſhoes, or ſome other of their neceſſaries, and cannot appear on parade, nor be put on duty, and are always placed in the Surgeon's liſt; for they *muſt* be accounted for; and this ſeems the moſt convenient place for them in the daily returns made to the commanding officer.

MANY

MANY alſo, of theſe called ſick, ail little or nothing; at leaſt, need very little medical attendance. Some are affected with chronic complaints, that only require occaſional viſits, and occaſional aſſiſtance; ſome with cut fingers, and others with blotches on their legs, preventing them from wearing their Long Gaters; nay, I have frequently ſeen the whole liſt not exceed twenty-ſix, and continue about this number for weeks, the above included, and this when the regiment was near 600 ſtrong *. During this time there was little need of any medical advice.

WE know that practitioners, who have the care of hoſpitals, out of the army, viſit daily far more than the number we have mentioned, beſides their attendance

* In the years 1782-3—it continued ſo for ſome months.

on a large private practice. Moſt of their patients require much attention; for few either come to hoſpitals, or employ Doctors out of the army, that do not really ſtand in need of their aſſiſtance. Why then is the regimental practitioner to labour leſs than the practitioner in common life? Let him only enjoy a proportionate compenſation, and he will ſeldom complain of any fatigue he may ſuſtain in the medical practice of a regiment. Let his life be only made comfortable, and the office he is engaged in more reſpectable, and he will ſeldom think the medical care of a regiment of ſix or ſeven hundred, nay of a thouſand men, too laborious *.

It may be objected, that the regiment is often cantoned, and ſeparated into dif-

* In the ſpring of 1782, moſt of the regiment were ill, at once, of the Influenza; but epidemics of this kind rarely happen.

ferent

ferent diviſions, which may make it not only very troubleſome, but even impoſſible for one perſon, daily, to viſit all the quarters. This is true, it will be next to impoſſible to viſit them ſeparated in this manner, but an eaſy method can be found; let ſome Surgeon in each town, where a diviſion or party is ſtationed, be applied to, and for the medicine money he will attend them during their reſidence. This is often done, as things now ſtand; why may it not be done, if the reformation hinted at here, ſhould ever be thought worthy of the notice of Government? It could be eaſily proved, that the ſoldiers, under ſuch medical people's care, would receive better attention when ſick; and more efficacious, at leaſt, more palatable medicines would be adminiſtered to them, than if under the care of a Mate, limited in his practice as already deſcribed.

A SETTLED Surgeon deals largely in medicines; his practice obliges him to procure

cure them both in abundance and variety; and his own reputation admoniſhes that they ſhould be of the beſt quality. He purchaſes them, likewiſe, at a cheaper market; hence he can afford a neat medicine to a ſoldier, perhaps cheaper than the regimental Surgeon can his coarſe ill-choſen drugs, bought from retailing druggiſts, or country apothecaries: it has already been mentioned how far a good medicine, well prepared, exceeds in efficacy thoſe ill prepared; how much more palatable, on this account, their medicines can likewiſe be made; and it is well known, how neceſſary even an agreeable vehicle oftentimes is, in the exhibition of medicines, to enſure their ſucceſs.

MANY of the ſoldiers buy medicines out of their ſmall pittance of pay, from the Surgeons of the towns wherein they are quartered, rather than be ſubjected to ſwallow the medicines which their own *Doctor* preſcribes for them. In this way they are often

often great ſufferers, and it would ſeem that there muſt be ſome fault on the Surgeon's part that thus compels them to it. For when this is the caſe, they muſt do their *duty*, as well as buy their medicines; ſince no man is ſuppoſed ſick without he be reported to the Surgeon. I am convinced one reaſon is, the neglect of proper vehicles to adminiſter medicines in. This, I know, is too little conſidered by ſeveral of the regimental practitioners: yet it would add little to their expence in the purchaſe or preparation of medicines.

SETTLED Surgeons, who take the care of a diviſion, ſhould daily receive from one of the corporals, a liſt of the ſick, for the ſake of order, in the ſame manner as is cuſtomary to be given to the Surgeon of the regiment; this might be weekly tranſmitted to the Surgeon at Head-quarters; nor would this conſume more than a few minutes of his time daily, and could not on that account be objected to.

WE

We ſhall ſuppoſe, from the encouragement given the Surgeon now acting without a Mate, that he is enabled to keep a horſe. It will, therefore, be no great trouble for him to viſit theſe different cantonments, if within a moderate diſtance, once, if not oftener, a week, converſe with the Surgeons under whoſe immediate care the men are placed, reſpecting their complaints; but he ſhould never interfere, or order any medicine whatever, without their concurrence; without ſome previous converſation with them on the ſubject. If the caſe be either tedious, or doubtful in its event, they may conſult together. Theſe gentlemen ſhould have an order to procure what wine may be thought neceſſary for the patients recovery, in caſes where its uſe is indiſpenſably.

When a camp is formed, if it be large, conſiſting of ſeveral regiments, a phyſician is appointed, and a general hoſpital eſtabliſhed; it is obvious, that a regimental Mate

Mate will be unneceſſary now, ſince all difficult caſes may be ſent there. But ſuppoſing no general hoſpital, the Surgeon's fatigue cannot be greater than in quarters or barracks; ſince the men are placed equally near him, in the ſmall circumference of a camp.

SUPPOSE again, his hoſpital be at ſome diſtance from camp, even two miles; the toil of viſiting it daily, nay, twice a day, if neceſſary, is nothing; ſhould it be at a greater diſtance, it would be better if he lodged at it, or as near as he can find conveniency. If he can hire no private lodgings near, which I think can hardly be the caſe in England, let him pitch his tent there, inſtead of ſleeping in camp. He may viſit camp once a day at his leiſure hours, and even dine there; but let the greater part of his time be ſpent near his hoſpital.

THE Surgeon ſhould have the choice of the houſe for an hoſpital, where a choice can be made; this, though an affair of the firſt magnitude to his patients, is too often left to the judgement of a Quarter-maſter. He ſhould take care to provide one ſufficiently large; and if one houſe may not appear large enough to contain all the ſick his experience leads him to expect, two or even three ſhould be rented for the duration of the campaign; two moderate houſes will certainly be enough: this will require not only more nurſes, but more firewood, and *Orderlies*, as well as an additional centinel. But ſome trifle in the augmentation of the duty, or the expences, is not to be put in competition with the health of the ſoldiers *. Much of his care

* Government has very wiſely made an extra allowance here, during the campaign. The hoſpital money which we mentioned to be generally 30*l.* per ann. now ceaſes, and in place thereof, the ſum of 7*l.* 10*s.* a month

ſhould be directed to the prevention of acute and epidemical diſeaſes. If the hoſpital be crowded, and the infectious, and non-infected be compelled to mingle together, diſeaſes may ariſe, which in a ſhort time muſt thin the regiment, notwithſtanding every medical care to ſuppreſs them.

When the hoſpital is bad, and the ſick numerous, if the weather be at all moderate, I would adviſe a few tents, to be erected, and part of the ſick lodged in them. For infectious diſeaſes theſe may be preferable to the hoſpital, in as far as they can be more eaſily kept clean, and a free circulation of air obtained, a thing of the higheſt conſequence. This was practiſed at Mahon. When the hoſpital fever, in the late war, Dr. Lind tells us,

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a month is given. In five months this amounts to 37*l.* 10*s.* which will defray the expence of ſufficient accommodations.

was brought from England into the hoſpital at Mahon, the houſe being found inſufficient for ſo great a number of ſick, *tents* were reared up in the fields for many of the men. Theſe poor fellows were thought to be badly accommodated, but it was very obſervable, that moſt of theſe who lay in the cold *tents*, recovered; when the mortality in the houſe was ſo great, that in ſome wards not *one* in *three* eſcaped *.

The cuſtom at preſent is, when the regiment is encamped, to keep the Surgeon always in the camp, leſt accidents ſhould happen there. But this appears a very unneceſſary rule, and is frequently a diſagreeable thing to the Surgeon. If accidents ſhould happen, are not the men eaſily and conveniently carried to the hoſpital? Should

* Vid. Lind, on the Health of Seamen.

this

this not be the caſe, a very ſhort time will bring him to them.

It may farther be ſaid, are not Mates neceſſary abroad, on actual ſervice? Encampments at home may be conſidered as actual ſervice; and if we have ſhown that they may eaſily be diſpenſed with in the one caſe, the ſame will follow in the other. Soldiers abroad are either in garriſons, or in camps; in both caſes the men are never ſo far ſcattered but the Surgeon may conveniently give his attendance. There are abroad, however, always general hoſpitals eſtabliſhed, which muſt ſubſtract greatly from his labour. Beſides, the regiment is almoſt daily on the decline by deaths, deſertion, &c. and cannot abroad be eaſily recruited. The fewer the number of the regiment, the leſs muſt be his toil. Should a battle be fought, much aſſiſtance, indeed, may be neceſſary; but even then the wounded are ſent, as faſt as convenience will allow, to the hoſpital.

A ge-

A general battle is, nevertheleſs, what ſeldom happens; ſkirmiſhes more frequently take place; here a few men out of a party detached on ſome ſervice, may be wounded; but this can never create ſo much fatigue to the Surgeon, as to require a mate conſtantly in the pay of government.

It may be farther urged, that the Surgeon may fall ſick, therefore be unfit for duty: this may take place; but he will always find ſome of the faculty, where he is quartered, ready to give aſſiſtance, provided he has formed any acquaintance among them, as we have elſewhere ſhown, he ought to do; at leaſt, they will readily undertake his duty, for the medicine-money, till his recovery. Should the ſame happen on foreign ſervice, he may have the aſſiſtance of ſome brother Surgeon, ſince one regiment is ſeldom ſtationed alone for any length of time on theſe ſervices. A neighbouring Clergyman will officiate for his ſick brother, and a neighbouring Surgeon *ought* to

to do the ſame for his ſick friend. I mean here only regimental Mates; I meddle not with the hoſpital Mates, nor the regulations and œconomy obſerved there; this would be ſtepping beyond the bounds of my ſubject.

Instead of the medicine-money which we think ſhould never be placed in the hands of the Surgeon, and for any fatigue more than uſual, he may be liable to undergo from the want of a Mate, he ought to be allowed the Mate's pay in addition to his own: and from neither ſhould any deduction be made. Beſides this, a gratuity ſhould be given by each officer to purchaſe medicines for themſelves: he is obliged to give them advice, but not medicines.

In ſome regiments, as matters now ſtand, the Surgeon is allowed a guinea a year from every Subaltern; two from each Captain; three from the Major; five from the Lieutenant Colonel; and ten from the Colonel.

For

For each ſoldier whom he inoculates for the ſmall-pox, government allows a guinea. This might enable him to live tolerably well, at leaſt in a cheap country; and yet I am ſtill of opinion, that even this is too ſmall for the encouragement of men of ſcience to continue in the ſervice. This ſhould be equal to what they may expect out of the army; indeed, if we conſider the many hardſhips which they undoubtedly muſt ſuffer, who are engaged in the army, to which perſons out of the ſervice are not expoſed, it ought to be more than equal.

It is not to be ſuppoſed that a man whoſe fortune is his profeſſion, and who has waſted not only much time but money, in acquiring a proper knowledge in it, will ever enter into the army for one hundred a year, (his pay is only 80*l.*) when he has the proſpect of making more than four times this ſum in common life, with equal eaſe, and a better reputation. Why then not allow him

him the ſame hire? When this is done, he is not on an equality with the other officers in many reſpects.

Let us ſuppoſe him twenty-five years of age before he be qualified for his office; I would think it almoſt improper, that any perſon ſhould enter into the army as a Phyſician, or qualified Surgeon, till he be nearly this age; neither his underſtanding is properly ripened, nor can a liberal education be finiſhed much earlier; and till both take place, he is unfit for ſo important a charge. Let us ſuppoſe, alſo, that he has received an expenſive ſchool education, and afterwards reſided ſeveral years at an univerſity, (the leaſt is four) and at no ſmall expence. All this is to be done before he can begin, as I ſhall call it, the world; or is in a ſituation to recover an equivalent for his time, money, and trouble. Here is upwards of one third of life waſted, which ought ſurely to be conſidered of material

weight, ſince we find the period of man's days ſo limited.

On the other hand, a youth at the age of ſixteen, (and many have been admitted much younger) may rank an Enſign in the army. He *may*, or he may *not* have received a claſſical education; (at this age it muſt be a very imperfect one;) this is not thought a requiſite in the military profeſſion. Let us ſuppoſe that he has not received one, which I am apt to believe will moſt commonly be found the caſe; at the age of twenty-five, if he be fortunate, he may rank a Major, nay, a Colonel; for to uſe the words in a theatrical piece, repreſented ſome time ago, "Colonels are all *young men now*." Here are two advantages he has above the Surgeon, not to mention others; firſt, he receives pay from the age of ſixteen, and without much previous expences for education; and ſecondly, at the age when the other is only qualified to be admitted,

admitted, he has not only an equivalent for his time, money, &c. but is far ſuperior to what the Surgeon can *ever* expect in his ſtation. Moreover, the officer has the farther advantage of having in view ſeveral other honourable, as well as lucrative ſteps before he arrives at the top of his profeſſion *. The Surgeon has few or none.

It may be ſaid, the officer often purchaſes, and thus pays both for his rank, and the emoluments ariſing from it: this, however, will make very little difference in

* The ſteps of preferment are few in the Surgical line: the vacancies happen ſtill more rarely. We have but few general hoſpitals belonging to the Britiſh army; few, therefore, can at all hope for preferment above that of a regimental Surgeon. Nay, we have heard, but ſhall not poſitively aſſert it for truth, that the Surgeon General, ſome time ago, gave it as his opinion, that regimental Surgeons were unfit to be Surgeons of Army Hoſpitals. If they deſerved this reflection, is it not ſtrange, that they ſhould have been appointed Surgeons to regiments?

the caſe, becauſe they have permiſſion to ſell when they wiſh to retire from the ſervice. A Surgeon is often placed in ſimilar circumſtances; he often, in like manner, purchaſes, and it is only then he has permiſſion to ſell, if he chuſes to quit the army; nay, of late, he is forbid to ſell, notwithſtanding he may have purchaſed; and what is ſtill worſe, when he is ſuperannuated and ſo infirm as no longer to be capable of doing the duty of his ſtation, there is no proviſion for him. He *may* retire, but if he has no private fortune, which for the moſt part is the caſe, he retires to *ſtarve*. Was he allowed, in his old age, to ſell, he might be able to ſubſiſt on it the reſt of his life. On the whole, it would appear but a moderate allowance, if government would ſettle two hundred per ann. free of all deductions, on the regimental medical practitioner, with the addition of Rations, when on ſervices where theſe are allowed, of the ſame value as received by a Captain.

THIS regulation would not ſtand government more than the ſervice already coſts. When the Surgeon's and Mates pay are added, it amounts to *7s. 6d.* a day; three and ſixpence a day more is all the addition required. Ten pounds per ann. may lawfully be ſubſtracted from the medicine money, which will reduce it to 60*l.* per ann. in regiments where 70*l.* is now allowed; a very great quantity of genuine medicines may be purchaſed for this ſum; even more than ſufficient for the ſick, not only of 400, the preſent, but 636, the late war eſtabliſhment of ſeveral regiments. A guinea is the allowance for every man the Surgeon inoculates for the ſmall-pox; this ſhould be ſtopped, and in place thereof 10*l.* per ann. added to the pay. Inoculation is now well underſtood, and needs little addition of medicine or trouble. Beſides, he ought to perform every medical duty, as it occurs, without a bribe.

We may venture to ſay, by this regulation government will be a ſaver; for one year with another every regiment muſt coſt upwards of ten guineas in this article. In place of the medicine cheſt of addition, which each regiment receives when in camp, let 6*l.* a year be allowed. We ſhall endeavour to prove in another place, that it is ſuperfluous, and is not in reality needed for the intention it is given; at an average it muſt be worth more than 6*l.* a year.—We have now found no leſs than 26*l.* of the ſum required; there remains only the ſmall deficiency of about 30*l.* a year to compleat the augmentation propoſed. This ſmall ſum muſt ſurely be looked on as a trifle, when put in competition with the good that muſt reſult from it, both to the ſoldiery and the Surgeon, but chiefly in what relates to the health of the former. The ſcheme to be adopted to raiſe this ſmall augmentation I muſt leave, however, to the wiſdom of the Legiſlature.

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An author, who upwards of twenty years ago treated on this ſubject, ſays, "Gentlemen filling the medical character, ſhould be ſought out more reſpectable, better qualified, and every way more truly honourable; and then they ſhould alſo be better rewarded than the generality of the preſent deſerve to be."—He is of opinion, a regimental practitioner, qualified properly by a liberal education, ſhould not have leſs than 250*l.* per ann.—"This competency," he adds, "in time of peace would be an inducement to abundance of learned and ingenious men, of ſufficient ſcience, to diveſt themſelves of ambition, and to quit the farther buſtle of a buſy world, for the means of a genteel employment in thoſe paths, into which from their firſt outſetting in life they had early entered *." The Surgeon, however, I am

* Vid. Brockleſby on Œconom. and Mil. Diſ. &c.

perſuaded

perſuaded would think the augmentation we have propoſed ſufficient. And, indeed, it would be ſufficient, provided no ſtoppages; I mean no arrears be allowed. To the charities they ought to contribute as they do now. The ſcheme the above author deviſes for his augmentation is from the ſtock purſe, but this appears to me exceptionable. It is a pity to rob one officer to ſerve another.

I AM apt to believe the reader, who underſtands the army cuſtoms, and regulations, will readily agree with me, the pay of ſubaltern officers in the army, is far too ſmall, and greatly inadequate to their neceſſary expences. Three ſhillings, or three and ſixpence a day to a man, obliged to live as the rank of an officer requires, is leſs than ten-pence a day to a labouring man, or even ſix-pence to a ſoldier: I could prove that the ſoldier on his ſix-pence, is at the end of the week, unleſs he be a ſpendthrift, the richer man of the two; i. e.

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can ſave more money from eating, &c. than the ſubaltern; but this is a ſubject which does not ſo much fall under our conſideration here; yet it is not unworthy of a more accurate inveſtigation; nor ought it to be beneath the notice of government: this likewiſe I have touched on in another place *.

With reſpect to Surgeons, the difference between a wandering life, like that of a ſoldier, and a ſettled life, like a private Phyſician or Surgeon, is ſurely very great. By an allowance of 200*l.* per ann. we ſhall not find that the regimental Surgeon enjoys any thing above a moderate competency. If he wiſhes to marry, which it is hoped is a ſtate that will rather gain, than looſe credit in the army, he muſt, even on this

* Vid. Treatiſe on the inſufficiency of Subaltern's pay.

ſum, exerciſe all poſſible œconomy to educate his family decently, and ſettle them reputably. Will any one venture to aſſert that there is any thing like ſuperfluity in a ſalary of 200*l.* a year, as times go, allowing for an officer's expences, and as the value of money now ſtands?

In almoſt any other way of life a man may obtain this, and that without either the toil or anxiety of ſtudy, or the expence at which medical honours muſt be obtained. In moſt of the genteel mechanical branches, a ſum as large can be yearly cleared. If this be true, who would enter the army, where he muſt ſtarve on much leſs than the half? A ſoldier (we comprehend the Surgeon in this title) purchaſes every article of life at a far greater price than others. He muſt dine at a common tavern expence, almoſt wherever he goes; in every town he finds himſelf a ſtranger, and moſt people he deals with ready to make what advantage of his ſituation they can. He is ſeldom above

above a few months in one place; beſides, the cuſtom of the army renders it almoſt neceſſary for him to frequent public places: at leaſt, he muſt often appear there, if he wiſhes to get into genteel company; this is a conſiderable additional expence.

I WOULD now hazard an opinion with reſpect to another regulation; i. e. when a Surgeon is deſirous of retiring from the ſervice; he ſhould let his intentions be known to the Colonel, ſix months previous to his reſignation. And if the place is to be purchaſed, that no candidate ſhould be allowed to make propoſals, who was not qualified in the manner already ſet forth; and till he produces his diploma before a committee of medical gentlemen appointed for this purpoſe, who are to judge, whether the claim to the privilege be valid or not.

IT would be better ſtill for the practice, if the place was not to be purchaſed, leſt

corruption ſhould ſometimes ſlide in; for he that can procure a ſum ſo large as to purchaſe 200*l.* a year, will never want for intereſt. It would ſell for little leſs than a Captaincy: now, it is well known, that few who can raiſe this ſum, will ever undergo the fatigue of ſo much ſtudy, as is requiſite to the right diſcharge of the office; when they may procure a place equally, if not more lucrative, as well as honourable, without much literature, or the expence that attends a liberal education. The regulation of the price, when it is to be ſold, ſhould, however, be ſettled by government.

I SAY leſs *honourable*; for the Surgeon is held in an inferior light to the youngeſt Enſign; and the King himſelf conſiders him ſo. In the year 1778, when his Majeſty reviewed the camps, no Surgeon was allowed to kiſs his hand, a permiſſion granted on that day, to every officer down to the Chaplain, except the Surgeons of the Militia

litia, who were preſent, who bore commiſſions as officers, and did it in virtue thereof. This diſtinction was *not* given to any lower than the Chaplain, and the Surgeon ranks after him. This proves that it is conſidered as *leſs honourable* to be a *Surgeon* than an *officer*. Why it ſhould be ſo, I leave to others to inveſtigate.

SINCE this appointment is a matter of great conſequence to the regiment, intereſt ſhould, as far as poſſible, be excluded; merit only ſhould meet with encouragement; neither rich friends, nor high birth, can ſupply medical knowledge; therefore both ſhould be excluded where this is wanting. But it is always to be preſumed, that where an univerſity has granted its licence, this, for the moſt part, is to be found. Yet even here there is a choice, for the talents of one may far exceed thoſe of another, though both have acquitted themſelves to the ſatisfaction of their Examiners.

I HAVE

I HAVE ventured, in a former chapter, my opinion relative to genius; and preſume, obſervations will confirm that ſuch exiſts, if care be taken to compare the different progreſs of different perſons following the ſame purſuits, and who have enjoyed the very ſame opportunities of improvement. It was this (genius) that Celſus meant, when he ſaid there ought to be in a Phyſician, or Medical Man, a *certain quality*, which can neither be named, nor eaſily underſtood.—" It is this undefinable ſomething of this great *man*, *that* conſtitutes the difference between two Phyſicians, who have had the ſame education, have ſeen the ſame caſes; have, in ſhort, had the ſame opportunities of acquiring knowledge, and yet the one ſhall infinitely excel the other. It was this ſame thing which made the difference, Martianus perceived between *himſelf* and *Galen*, and which induced him to ſay, one day, when he met him at Rome,—*I have read the prognoſtic*

of

of *Hypocrates as thou haſt, why then cannot I prognoſticate as well as thou?*"

THERE is nothing, perhaps, that has contributed more to the preſent contempt in which regimental practice is generally held, than the buſy interference of intereſt. A young man has, perhaps, never been in any medical ſchool, or very little; he goes out to ſome of our colonies, in character of a mate, with as little medical foundation; he is, perhaps, a good companion; a *jolly fellow*, as the term is; and, on the whole, an agreeable young man. By his officiouſneſs, and attention to perſons of ſuperior rank in the army, he ſtill ſtrengthens his intereſt; he is ſoon recommended for preferment in his profeſſion, and as ſoon obtains it. Though, in many reſpects, he may be very deſerving, yet ſuch muſt be an improper perſon for the truſt now committed to his charge.

THEY

They do not conſider, that neither his jokes over the bottle, his ſmart repartees, or the ſtudied politeneſs of his addreſs, can aſſiſt him in removing the gout from the ſtomach, ſhould any of his company need his aſſiſtance in this way, nor yet give him abilities to remove diſeaſes, when his duty calls him among his patients. A French lady was told, her Phyſician had not common ſenſe; ſhe replied——*tant mieux—Un homme qui paſſe ſon tems à etudier le ſens commun, comment peut-il apprendre la medicine?* She thought, if he had conſumed his time in ſtudying *common ſenſe*, he would have had none for the ſtudy of phyſick.—Not reflecting, that if he wanted common ſenſe, he muſt be but a poor preſcriber. —But from recommendations, and promotion obtained by the means we have ſuggeſted, it would lead one to think, they too frequently conſidered medical ſcience as the attendant of *jollity* and *good-fellowſhip*.—But we may anſwer with the ſame lady, though ſhe applied it differently.—*Qui parle grec*

grec comme Homere, ne ſait pas danſer.—He that ſpends much time in one purſuit, *muſt have* the leſs left for others.

AGAIN, young men may be employed as Mates in General Hoſpitals, be expert enough at dreſſing a wound or ulcer, yet be altogether unqualified to preſcribe in diſeaſes of the general ſyſtem; nay, even in many topical complaints. To cure a fever, and ſpread and apply a plaiſter, are truly different, requiring very different abilities; the one is obvious, and a knowledge of it more eaſily acquired; the other complicated, and difficult of inveſtigation, and requires much knowledge, even in colateral branches of ſcience.

IT will be ſaid, ought not ſuch as have ſerved in the capacity of Mates, in regiments, for upwards of twelve, fifteen, nay, ſeventeen years, to be promoted to Surgencies, when vacancies happen? Un-

doubtedly, provided they be found qualified for the office: but length of ſervice, though it ought to be rewarded in ſome way, ſhould not entitle a man to an office, the principal duties of which he is ignorant how to perform, and likely ever to remain ſo *; there is an abſurdity in the very ſuppoſition. If any ſuch be found in the army, by all means let ſome reward be given them; but ſuffer them not to be advanced to an office where they may have an opportunity of doing miſchief; nor, like unwholeſome leven, let them be incorporated

* Mr. G—ſerved as Mate ſeventeen years and more, in —— regiment of foot; the Surgency at laſt became vacant; he offered himſelf at Surgeon's Hall for examination, and was rejected, as not qualified; and yet my informer aſſures me he had the ſole medical care of the regiment, for near eight years of the time he ſerved as Mate. If unqualified, why ſo long truſted? The fault lay in admitting him at firſt, without qualification.

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with the new maſs, leſt the whole be contaminated.

It will be ſaid, is no aſſiſtant neceſſary? is the Phyſician or Surgeon to do all the drudgery himſelf? It has already been proved, that no great degree of drudgery can attend it; at leaſt, not more than one perſon, by the aſſiſtance of an Hoſpital Nurſe, and one or two Orderlies, can perform. We ſhall, however, allow an aſſiſtant, but one which ſhall be no additional coſt to the ſtate.

In every regiment there are one or more old worn out men, who are diſabled either by ſome diſeaſe, or perhaps by age from doing duty, and are always allowed the privilege of remaining on the ſick liſt. Let one or two, if neceſſary, of the moſt expert of theſe, be choſen for the purpoſe. And with a very little care, nay, with a few day's inſtruction, they will be qualified for moſt of the ordinary buſineſs of a Mate.

They will ſpread plaiſters, dreſs ſmall ſores, and puniſhed mens backs *, make unguents, boil poultices, and many things of this nature that are neceſſary, and will be done by

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* Since I have occaſion to mention puniſhed men, give me leave to relate what I was lately told to be facts, that fell within the knowledge of my informers. —A medical gentleman in this neighbourhood affirms, that a ſoldier died, after receiving 700 laſhes, and that in a very ſhort time after.—Another profeſſional gentleman likewiſe declares, he knew one to die in Dublin, after 500.—I had mentioned, when on the ſubject, that I believed few, if any, ever fell martyrs, immediately, to flogging.—I am ſorry to have it in my power to record theſe two caſes—but it is hoped they may ſerve to put the Surgeon on his guard, when his duty demands his preſence at puniſhments.—It has lately been hinted to me, that if it was recommended to the Surgeon, to adviſe that the culprits be bound down to a flat board, or a table; that in this ſituation they could bear more puniſhment with leſs danger, than if they were tied up in the common way, with their hands ſtretched above their heads, to the halbards—the experiment is certainly worth trying—at any rate, things cannot be worſe,

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them with pleaſure, though if left to a man of education, ſuch as the Surgeon, would be troubleſome, and even beneath him to perform; if any thing in the way of his duty ought to be held in this light.

SUCH an aſſiſtant is analagous to a porter in a druggiſt's ſhop. I know from experience this is practicable; I have taught no fewer than five ſuch perſons with very little trouble, and who, in a very ſhort time, have afterwards ſaved me many diſagreeable jobs, that without them I muſt have undertaken. I have been, ſometimes, almoſt tempted to truſt them to bleed, only that this is an operation, that ſhould never be truſted to men ignorant of the ſtructure of the parts concerned in it.

FARTHER, reſpecting the inutility of Mates; we know that in time of war, almoſt any thing, having the appearance of a man, is acceptable; hence the ſickly and healthy, the ſtrong and the weak mingle together,

together, and all muſt do the ſame duty. In times of peace, none but the young, ſtrong, and healthy are enliſted. It is reaſonable, then, to ſuppoſe, that number for number, fewer will be ſick in time of peace than in time of war; the duty in time of peace is likewiſe leſs than in war; and ſince we have already ſhown, they may be diſpenſed with in time even of war; it is obvious, they may be diſpenſed with in peace. An epidemic may ariſe at any time, whether in peace or war; but it is no objection to our propoſed plan.

I HAVE ſpoken all along of the full complement in time of war; but it is evident there muſt be much fewer in time of peace, conſequently, leſs buſineſs to employ the Surgeon. Sometimes, the peace eſtabliſhment is ſo low as twenty-ſeven a company, eſpecially in Ireland. The peace eſtabliſhment before the preſent, I think, was at this number; the preſent, however, is forty a company, which ſuppoſing the regiment

giment compleat, amounts in ten companies, only to 400 men. Surely one perſon is ſufficient to take care of the ſick of this number, which at an average, can hardly exceed twenty; and more than half of theſe, ſuch caſes as may require very little medical aid. When the labour is ſo ſmall, where is the utility of a Mate? A period of ſeven years we conſider as a long war; but we are often bleſſed with a peace of three times this period. This I would conſider as a farther argument for the reduction of Mates. According to our calculation, it is plain, in time of peace, they may be diſpenſed with; and we have already advanced reaſons to ſhow the office may be even ſtruck off in time of war, ſuppoſing the regiment at its full complement.

Some may ſtill farther object, that if a Mate be not allowed, the Surgeon's attendance in the field on field days, muſt be interrupted, for ſome perſon muſt remain

main convenient to the ſick. To this I anſwer, that his attendance on common field days may very readily be diſpenſed with; there is no abſolute neceſſity for it. Indeed, it is conſidered more as a compliment to the officers, than as of any utility expected from it. The Surgeon, or Mate, for they generally attend alternately, are never expected in the field, unleſs the officers alſo be ordered out. When the Adjutant and only an orderly officer march out the regiment for exerciſe, neither he nor the Mate goes.

The reaſon given for their going at all, is, leſt accidents ſhould happen. We might give the ſame anſwer to this, which has already been offered to obviate the cuſtom of ſleeping in camp; the accidents which take place are of ſo trivial a nature, in general, that they very rarely require the preſence of a Surgeon; they are ſeldom more than a ſcratch with a flint, or a ſlight cut in the hand, in the hurry of fixing

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and returning the bayonet. During ſeveral years, I never knew nor heard of any, ſave the following: firſt, in very uneven ground, a man at one of the great guns fell, in the hurry of changing the poſition of the line, whereby the wheel of the carriage on which a ſix-pounder was placed, ran over his legs, and fractured the fibula; but when this did happen, of what uſe was the Surgeon's preſence there? He neither could, nor did he attempt to do any thing till the man was carried to the hoſpital: when this took place, the regiment were at exerciſe near ſeven miles diſtant from it. Might he not have been at his hoſpital, or near it, all the time? A ſecond caſe happened, during my being out with the men one morning, when by over fatigue, one of the privates fell ill; the commanding officer ordered him off the field, with two drummers to aſſiſt him to the hoſpital, while I followed at my leiſure, juſt time enough to be there when he was laid in bed. Might I not have remained at

the hoſpital? A third, and it compleats the catalogue of accidents, happened on a another field morning, in cold weather, when in the hurry of manœuvering, a ramrod was ſhot through a man's hand; here the patient was taken to the hoſpital to be dreſſed. Where then, in theſe caſes, was the neceſſity of the Surgeon's preſence in the field?

A SURGEON may be as uſefully employed at home as in the field; it is enough if he be ordered to keep himſelf always in readineſs on days of exerciſe, leſt accidents ſhould take place. Suppoſe him in the field, his preſence can be of little uſe; he cannot carry a medicine cheſt with him; when his aſſiſtance is wanted, it is not always in the way of bandage and plaiſter; yet, if they will inſiſt on it, becauſe it has long been a cuſtom, I ſhall not contend much againſt them. The orderly men, with proper directions given them, will ſufficiently ſupply the place of Mate

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in the hoſpital, till the Surgeon's return, which is generally in the ſpace of a few hours.

THESE will be conſidered, I apprehend, as unwarrantable innovations, an appellation which all reformation receives; and the propoſer be alſo held as ſelf-intereſted. But we hope this will not be found true. There are ſome ſuperior to ſuch ſordid motives; ſuch may propoſe ſchemes, that may be denominated innovations; they diſintereſtedly propoſe them, and only becauſe they appear preferable to cuſtoms in uſe. The public muſt judge from the arguments adduced in their favour, and the inconveniencies of the others compared together. On ſuch evidence their merit ſhould reſt; and they ought to ſtand or fall in the public opinion accordingly.

THERE is no great fear, however, from innovation, where uſe and cuſtom have long ſwayed. It has always been found difficult to remove what has been long eſta-

bliſhed, though ever ſo abſurd. Such is the force of habit, even among the intelligent.

To give an example from our own profeſſion, though they may be drawn from every part of life. I knew a Surgeon who uſed a tooth drawer, invented almoſt in the infancy of the improvement of ſurgical inſtruments, though well acquainted with its inconveniences, and who had ſeen many of the beſt form. It had been in the family, I believe, ſome generations; he preferred it to all others, though he had not a ſingle argument, but habit and cuſtom, to urge in its favour.

This may not be a caſe exactly in point, yet it will ſerve to ſhow us the power of prejudice; the prejudices of our forefathers, even in what relates to education, lie deeply rooted in us. Innovators appear like the approach of an enemy; we are rouſed, and unite our force againſt them.

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Innovations then, or improvements of any kind, in any department, will ever meet with warm oppoſition; but this will never ſerve with the unprejudiced, for a reaſon, that they are always unneceſſary.

CHAP.

CHAP. XVI.

Of extra-Medicines allowed each Regiment, when in Camp, independent of the Medicine Money; and of their unneceſſary Expenditure.

TO every regiment encamped in England, as well Militia, as Regulars, a cheſt of medicines is ſent by government, in addition to the common allowance of medicine money. I preſume the ſame is followed on ſervices abroad. This is done on the ſuppoſition of more diſeaſes appearing in camp, than in quarters, and on a preſumption that the medicine money may be too ſcanty to purchaſe all that may be required. Both theſe ſhould be proved before the ſuppoſed deficiencies be ſupplied.

With reſpect to the firſt; it frequently happens, that where the ground for the encampment has been well choſen, and a due regard paid to ſituation, ſoil, and water, as far as circumſtances permit; neither more diſeaſes, nor greater fatality will take place, for the moſt part, in camps, than in quarters. Though Great Britain be chiefly meant here, we may add Ireland alſo; nay, inſtead of more, much leſs ſickneſs has taken place; and camps have proved more healthy than either quarters or barracks were in large towns, or in bad ſituations, or otherwiſe unfavourably contrived *. I can point out an inſtance,

* Several of the barracks are ill-contrived; we may give for example, thoſe of Chatham Lines, and Hilſea, at Portſmonth. The barracks at Tynemouth, are not only too ſmall, but the walls too thin. If barracks be built of brick, the walls ſhould be of a proper thickneſs to reſiſt the rain, &c. Great attention ſhould likewiſe be paid to the quality of the bricks. If they be made of ſalt water, the walls can never be dry,

where a camp turned out more healthy, both to the officers and men than quarters. In one caſe, in all probability it ſaved the life of an officer. This gentleman was of a ſlender make, a delicate conſtitution, and mobile temperament from nervous weakneſs, chiefly induced by irregularity in living: he had been long affected with a chronic catarrh, and even laboured under an affection of the lungs. This was proved repeatedly from the bloody ſputum, he ejected at different times. His cough was always inceſſant, and frequently depriving him of ſleep; and he was almoſt as emaciated, as if in the laſt ſtage of a conſumption. But ſoon after taking the field in the beginning of July, 1782, on a dry

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dry, from the ſtrong attraction ſubſiſting between the acid in the bricks, and the moiſture of the atmoſphere. I have ſeen floors laid with ſuch bricks, that were conſtantly wet, as if new waſhed, though a fire was kept almoſt daily in the room.

common,

common, in an elevated ſituation on the eaſtern coaſt of Suffolk *, all his former complaints almoſt entirely vaniſhed; he recovered his fleſh; his cough diſappeared; and every day gave him a healthier look.

The good effects of the healthy ſituation did not take place in him alone, but among the troops in general that formed the camp. In the end of September, when they were reviewed by the Commander in Chief, not a ſingle man was ill in one of the regiments, and in the other ſcarcely any, that deſerved to be in the Surgeon's liſt. During a ſpace of four months, only one man was ſeized with a fever; nor was this the offspring of the place; for he brought it with him, from a priſon where he had been confined for ſeveral months be-

* On Hopton Common, between Yarmouth and Loweſtoffe.

fore; the commanding officer having given him up to the civil law, for an accuſation brought againſt him.

WET, and otherwiſe unhealthy ſeaſons, may happen; nor will the ſervice always admit of the beſt ſituations for encampments. For the moſt part, however, in England and Ireland, it will be the fault of thoſe concerned in chuſing the ground, if the ſituation be bad. We are not now hemmed in to a mile or two by an enemy. Proper attention is very far from being paid to the ſituation of camps on every occaſion; might we not bring the common now mentioned as an example? In the year 1781, a number of troops were encamped on it in a piece of low ground, but not above a muſquet ſhot more to the north; whenever a few hours of rain came, the water ſtagnated among the tents, and even deſcended from the higher ground among them, the bad effects of which were ſeverely felt. They were taught by next year, that

that experience, at the expence of much ſickneſs, which common ſenſe, without much philoſophy, might have plainly predicted, and at firſt pointed out to them, in laying out the ground.

THE Surgeon in theſe caſes is ſeldom conſulted; indeed he is ſeldom preſent: for the ground is generally marked out ſome time before the troops arrive on it. As he is much concerned in the conſequences, he ſhould have a vote in the management, and more eſpecially as his medical knowledge gives him, or ought to give him pre-eminence in judging of it; therefore he ſhould be ſent to the ſpot to reconnoitre, ſome days before the march commences.

THE Quarter-maſter is always ſent; he may now accompany him, and in forming his opinion of the ſoil, &c. he ſhould take the aſſiſtance of the medical people near the place. He will be of much more utility employed on this ſervice than with the

regiment on the march, to watch for accidents and other maladies, which ſeldom take place; and where, like field ſervice, as already treated of, when they do happen, he can prove of little uſe till the men arrive at the deſtined ground; beſides, a ſecond advantage would reſult from it; he would have a place provided for an hoſpital, and be prepared to receive what ſick he had. It is always ſome days after their arrival before the ſick can be accommodated, in the manner we generally go to work at preſent.

We know, indeed, that at an average with other countries, Great Britain may be ſtiled moiſt; the ſeaſons are variable, and the weather often ſuddenly changeable throughout the iſland; yet we find alſo in it, occaſionally, long ſets of fair dry weather; it was ſo in the ſummer of 1783 —it has been ſo even in winter ſeaſons. The greater degree of exerciſe the ſoldiers are obliged to take, from the nature of camp duty,

duty, is conſiderably in their favour, provided it be not carried by frequent field days, to a degree of over fatigue. It is well known, that nothing is more conducive to diſeaſes than indolence. A certain degree of exerciſe in moiſt and relaxing weather, and when the men are not ſuffered to lie down in wet clothes, is altogether neceſſary to obviate ſickneſs. The beneficial influence of motion, in carrying on the circulation of the fluids, and preventing obſtructions, is equally well known; none will deny that it braces and ſtrengthens the body.

In towns, ſoldiers, for the moſt part, have too little exerciſe; infectious diſeaſes are frequently foſtered there; and troops quartered in them very apt to catch the reigning maladies, their way of life contributing to this end; their billets are dirty and incommodious, and their own irregularity great. Wherever infectious diſeaſes happen, if ſoldiers be expoſed to contagion,

gion, they are more ſeverely handled by them than others. Such diſeaſes, alſo, are always obſerved to take their riſe among the pooreſt of the inhabitants, where their clothes are ſeldom changed, and their dirty and ill-aired habitations ſeldom ſwept; living in cloſe allies, and confined ſtreets. In theſe places the ſoldiers are frequently converſant, which expoſes them to the infection; while their poor living, as a debilitating cauſe, prediſpoſes their bodies for its reception.

AGAIN, if proviſions be wholeſome, and the ſeaſon not remarkably moiſt, we have no reaſon to apprehend much diſeaſe in camp. It ſeldom happens that proviſions are ſcarce, or of bad quality in England; it is famed through Europe for plenty. Soldiers encamped here are not cut off from ſupplies by an enemy; neither are they, in general, harraſſed with fatigue. The markets are open to them; they are now ſtocked in greater abundance, by ſuch

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as have proviſions to diſpoſe of in the neighbourhood. None need complain of hunger who has money to purchaſe. A ſoldier has always his ſtated pay, on which he endeavours to live, now faring better, now worſe, according to the rate of victuals; but as meſſes are formed in camp, and a contractor furniſhes them with proviſions; their fare is nearly the ſame whether dear or cheap.

Wet ſeaſons, vitiated air, and ſalted food will give riſe to the ſcurvy; but all theſe cauſes are ſeldom found to concur in England; hence it is rare to find this diſeaſe among camps in Britain. Bad food, and wet ſeaſons, &c. will likewiſe give riſe to dyſentery; and very dry ones lay the foundation of cholera, yet record does not furniſh us with many dangerous epidemics of theſe kinds, during the encampments of Britain. In many parts, we grant, intermittents, are endemic; but we neither find them ſo dangerous nor ſo numerous, for the

the moſt part, as in ſome other countries, where there is more moiſture, more wood, and leſs free perflation. The jail, or camp fever, has appeared in England; it has done the ſame, and even to a great degree in quarters. It aroſe among the troops in the caſtle * of Edinburgh, in the ſpring of 1780; and, perhaps, on other occaſions, with as much violence and danger as ever it has been found in camps. All theſe diſeaſes are more the offspring of other climates than Great Britain; and on average, as often in towns, as in camps formed in any part of the iſland. Now, if this be allowed, it is plain, there is not more need of additional medicines in camp; and it follows, that the additional cheſt is unneceſſary.

As to the ſecond argument, that the common medicine-money is not ſufficient,

* Vid. Differt. in aug. de febr. auctore. J. Bell, 1780.

we

we have already delivered our opinion and reaſons on it. We ſhowed, that not above a third of it is ever expended in medicines, nor is it wanted; hence we have propoſed the ſum of ten pounds to be taken from it, as part of the additional pay to be granted to the Surgeon. Genuine medicines may be purchaſed for 60*l.* a year, more than ſufficient for the ſick of 700—in peace we have only 400 men. The regiment is ſeldom compleat; yet, did it conſiſt only of twenty men, the full complement of medicine-money is given.

We ſhall ſuppoſe that the cheſt diſpenſed yearly to each regiment in camp, is worth at an average 6*l.* 6*s.*—and let us again ſuppoſe the number of regiments encamped to be ſixty *—this amounts to

* In 1782, ſixty-three regiments were encamped in England.

360 guineas a year. This ſum will be much better beſtowed in money to the Surgeon of each regiment, as an augmentation of the pay. It will be ſaid, that it is a matter of no moment whether he receives the medicines or the money, ſince he can ſave it out of the medicines; but it will be better to ſtop it, and let ſix pounds a year be granted; i. e. let him enjoy a ſubſiſtence of eleven ſhillings a day, of which this will make part of a fund from whence it is to be defrayed.

It is readily granted, that taking the field is more expenſive than quarters. A marquée muſt be purchaſed, with bed and utenſils neceſſary to furniſh it; but the forage of three horſes will aſſiſt in defraying it.* I

* In the plan propoſed, it was mentioned, that the Surgeon ſhould be allowed Rations equal with a Captain, during encampments, &c. a Captain receives for 3 horſes, beſides Bat. and Baggage money.

ſtate

ſtate this at two ſhillings a day; which in five months, the uſual time of encampments, amounts to 15*l.* This we allow, is far inferior to the firſt year's expences in camp; but taking three years, at an average, it will be ſufficient; a good marquée will laſt three ſummers, if the weather be moderate; the firſt year's expences we ſhall ſtate at 27*l.* 2*s.* the next two only at 10*l.* each*; the whole extra-expences then, for taking the field for three years, amount only to 42*l.* 2*s.* his forage money, for the ſame time is 45*l.*—But to this we are to add the Bat. and Baggage money, allowed officers in camp, and his ſhare of this is to be equal to a Captain's; from all which it appears, that the extra allowances in camp, are a ſufficient ballance for the extra

* At a moderate eſtimate, the bed will be 10*l.*—a table and two ſtools, 1*l.*—the marquée, 16*l.*—theſe ſummed up, amount to 27*l.* 2*s.* This was the expence to the officers at Hopton Common in 1782.

expences; and, therefore, this additional medicine cheſt, on this plea, is unneceſſary.

Let me conclude theſe remarks with a a hint at ſurgical military precedency. From the loweſt order, a regimental Mate, to the higheſt, that of Surgeon-General, it is as follows—Regimental Mate—Hoſpital Mate—Regimental Surgeon—Apothecary to a general hoſpital—Surgeon to an hoſpital—Surgeon General.—In this line of precedency we find the Apothecary ranks almoſt at the head. It is not from the regimental Surgeons that a Surgeon to a general hoſpital is choſen, but from the apothecaries; and before the regimental Surgeon has any proſpect of ſucceeding to this rank, he muſt be degraded to an Apothecary, an humble mixer of drugs. Strange, truly! I object not to the Apothecary of an hoſpital being rewarded with 200*l.* a year; though even this is ſtepping far beyond what is given to men of the ſame employment,

out

out of the army. It is ſeldom the ſalary to the Apothecary of hoſpitals, out of military life, exceeds half of what is thought neceſſary for the Surgeon. It is generally thought, that there is leſs expence neceſſary in an education for this branch, than for a Surgeon. Here the regimental Surgeon is obliged to ſubſiſt on 4*s*. a day—the Apothecary has no leſs than 10*s*. with the addition of ſuperior rank. This order ought, in juſtice to the regimental Surgeon, to be changed. Hoſpital Surgeons, ſhould be choſen from regimental Surgeons; and men poſſeſſing knowledge of the mixture and compoſition of drugs, who have undergone proper examinations for the ſame at Apothecaries Hall, and none elſe, ſhould be choſen to fill up this office.

CHAP.

CHAP. XVII.

Neceſſity of a liberal Education to practice Medicine ſucceſsfully.—Regimental Practice more the Province of the Phyſician than the Surgeon.

MEDICINE, though frequently termed an art, is a ſcience, and truely a very complicated one; in comprehending it, as becomes its profeſſors, every part of nature is to be ſtudied; but more particularly the animal, vegetable, and mineral kingdoms; nor is this to be done ſuperficially; nay, with much care and attention are the component parts to be ſcrutinized, and their principles inveſtigated by ſuch as wiſh to be liberally educated in it.

STRABO

STRABO ſays, it is impoſſible to be a great poet, without being a man of real probity; this obſervation is, undoubtedly, not leſs applicable to the phyſician than the poet,—"can any phyſician in good conſcience venture to preſcribe a medicine, without at leaſt having formed inductions from the moſt exact analogy?—is not that man an enemy to his patient, and to ſociety, who pretends to cure without knowing to a certain degree, the nature of the diſeaſe, both from its cauſes and ſymptoms, and its antecedent, and preſent ſtate? is it not to be wanting to every thing we owe to humanity, and even to religion, to approach the bed-ſide of the ſick, without having previouſly acquired the neceſſary knowledge? can any man ſay to himſelf, *I have* done all *I could do*, if he is unable at the ſame time to ſay, "I *know all* that I *ought to know?*"—Such is the language of a celebrated phyſician, a language that muſt ſpeak to every man's breaſt, and carry conviction wherever it is heard.

A KNOW-

A KNOWLEDGE of natural and experimental philoſophy, is in a phyſician almoſt abſolutely neceſſary; nor ſhould moral philoſophy be excluded. In a word, a Phyſician ſhould not only be acquainted with phyſics, i. e. with the works of nature in general, but likewiſe metaphyſicks. I remember to have heard the ſame declaration from an illuſtrious profeſſor * to his pupils. His opinion, on this head, he told them was, that a man who was not a tolerable metaphyſician, would never be a diſcerning Phyſician.

IT was not his intention by this, to inculcate that falſe ſpecies of reaſoning, which confounds the mind without enlightening it, and, like an ignis fatuus, leads farther aſtray the farther we purſue; not the ſubtile diſputations of the

* Profeſſor Cullen.

ne-

neceſſitarian, or the reveries on the doctrine of chance. His meaning was, if I may be thus far allowed to interpetrate it, that accurate inveſtigation, and chaſte reaſoning, proceeding cautiouſly from what is known, to what is unknown, or from effects to their cauſes, is the true way to arrive at the end in view, an explanation of various phænomena that preſent in the courſe of medical practice; and without ſome enquiry into the union of ſoul and body, and of their action on each other, this cannot ſo fully be done.

The ingenious Dr. Percival, in a paper written to prove the utility of experimental philoſophy, and endeavouring to wipe off a ſtigma thrown on it by the author of Hermes, ſpeaks of metaphyſics in theſe words, after telling us he had always ſtudied them with delight, "it (this ſcience) invigorates the faculties of the mind, and gives *preciſion* and *accuracy* to our inveſtigations, by inſtructing us in the nicer diſcriminations

of truth and falſhood *."——" The mutual action of the body and the mind upon each other, is felt every moment. The knowledge of the nature, effects, ſymptoms, and meaſures of theſe reciprocal influences, forms no incoſiderable part of the ſcience moſt neceſſary to the *Phyſician*, the *Moraliſt*, and the *Divine* †."

In a former part of this work I have adduced facts to prove the reciprocal influence the body and mind have over each other, where I had occaſion to mention that diſeaſe diſtinguiſhed by Noſologiſts under the appellation of *Noſtalgia*. It was there ſhown ‡ that the affections of the mind were capable of inducing even fatal diſeaſes, and that many have fallen a prey to them. In Switz-

* Vid. Mem. of Phil. and Liter. Soc. of Manceſter, v. II. p. 327.

† Dr. Barnes, ibid.

‡ Vid. vol. I.

erland,

erland there is a dance which the young ſhepherds perform, to a tune played on a ſort of bagpipe; the tune is called *Rance de vaches*; it is wild and irregular, yet has nothing in its compoſition that could recommend it to our notice. But the Swiſs, it is affirmed, are ſo intoxicated with this tune, that if at any time they hear it, when abroad on foreign ſervice, they burſt into tears, and *often fall ſick*, and *even die* of paſſionate deſire to reviſit their native country. For which reaſon, in ſome armies, where they ſerve, the playing of this tune is prohibited *. True then, it muſt be, as the poet has beautifully expreſſed it, that

There is in ſouls a ſympathy with ſounds,
And as the mind is pitch'd, the ear is pleas'd

* Vid. Dr. Beates's Eſſ. vol. II. p. 175.—Alſo Rouſſeau Dict. de Muſique. art. Rance de vaches.

With melting airs, or martial, briſk, or grave.
Some chord in uniſon with what we hear,
Is touch'd within us, and the heart replies.
How ſoft the muſick of thoſe village bells,
Falling at intervals upon the ear,
In cadence ſweet! now dying all away,
Now pleading loud again, and louder ſtill,
Clear, and ſonorous as the gale comes on.
With eaſy force it opens all the cells
Where mem'ry ſlept. Whenever I have heard
A kindred melody, the ſcene recurs,
And with it all its pleaſures, and its pain. *.

"EVERY experienced Phyſician," ſays Zimmerman, "knows that the diſeaſes of the mind will yield to no phyſical remedies, unleſs the ſoul concurs at the ſame time in relieving the patient.—The more the ſoul of the patient ſeconds the endeavours of the Phyſician, the greater will be his hopes of ſucceſs. An intelligent, and prudent Phyſician has often begun and compleated cures

* Cooper's Poems, v. II. p. 23.

which

which ſeemed to be impoſſible.—If therefore there are diſeaſes, in which the patience, the aſſiduity, and the indulgent attention of a Phyſician, can ſo far influence the mind of a patient, as to contribute to his cure, may we not very juſtly conclude, that the diſpoſitions of the *ſoul* may be the occaſional cauſes of changes in the *body*.—It proves to us, that the paſſions, and diſpoſitions of the mind, having ſo great an influence on our health, it *behoves* the Phyſician to aim at keeping both the mind and the paſſions of his patient in order."—Another author, in his facetious and humourous manner *, compares the relation between the body and ſoul, to a coat and its lining; for, if you rumple the *one*, ſays he, you rumple the *other*.—If this be true, which almoſt every day's experience fully proves, the ſtudy of the paſſions would

* Triſtram Shandy.

ſeem

ſeem an indiſpenſible part of a Phyſician's education; and on this ground, we aſſert, that not only a knowledge of the *phyſical* but the *moral* man ſhould be acquired. Phyſicians ſeem to be more intereſted in the acquiſition of this knowledge, than any of the other claſſes of civil life; the paſſions come in for ſo great a ſhare in *diſeaſes*, that it would ſeem criminal in a Phyſician to enter into practice, without having particularly applied himſelf to the ſtudy of man."

It is by "nice diſcrimination," by rational inveſtigation, and preciſion, that we may hope to diſtinguiſh what is *true* from what is *not*, and thus purſue our reſearches ſucceſsfully; and the farther we recede from this plan, the nearer we approach to empyriciſm. As far, then, as metaphyſics can aſſiſt us towards this end; ſo far they are uſeful. For though an empyric may occaſionally be ſucceſsful in his practice, yet it is but reaſonable to conclude, that nine times out of ten

ten he muſt miſs his aim. A blind man cannot diſtinguiſh colours, nor he that is deaf, the harmony of combined ſounds in muſic; neither can an effect be removed when the cauſe lies concealed, except by mere chance, on which no wiſe man will ever build his dependance.

Some may anſwer, that the moſt acute inveſtigations of the beſt cultivated underſtandings, will frequently fail in finding the real cauſes of certain phænomena, that preſent in the cultivation of medical ſcience, and in practice; or when found, that they are as far from being able to remove the maladies induced, as if unknown and undiſcovered. This is granted; but if the informed may, and often do, the uninformed in ſuch intricate caſes, muſt neceſſarily fail. But it ſhould be remembered, that in conſequence of their ignorance, in caſes where the literary and more enlightened man would ſucceed, they will as aſſuredly

aſſuredly err, unleſs accident turns the ſcale in their favour.

It is true, experience will teach us on ſeveral ſubjects, where reaſoning could have none, or but little effect; but let this maxim be conſtantly kept in view—to *reaſon*, as a practitioner, and practice with *reaſon*.—Experience, we know, proves, that ſcammony will purge, that arſenic will poiſon. It tells us alſo, that neutral ſalts as well as ſeveral other ſubſtances of the mat. med. will do the ſame. By reaſoning alone, perhaps, we never could have been able to diſcover this. The experience that taught us the purgative qualities of medicines, teaches at the ſame time their different modes of operation; it points out that the one acts mildly, while the other is highly irritating and draſtic. But when, in certain circumſtances, we are about to make a choice, which to prefer, we call in reaſoning to our aid, which we build, indeed, on this experience. After inveſtigating the cauſe,

cauſe, we make an eſtimate of the power to be applied for its removal, with a due allowance for conſtitution, and the preſent ſtrength of the ſyſtem. It is this that determines the choice we are about to make; it is this that cautions us againſt the uſe of the one, while it acquieſces in, or enforces the uſe of the other. It is by this that we are informed, that a promiſcuous application of them, though both ſeem to produce the ſame effects, i. e. open the belly, would prove very detrimental, and highly injurious.

This, it will be ſaid, is ſtill in part reaſoning from experience; I grant it; and wherever it will apply, we ought to have recourſe to this guide; but many circumſtances will preſent themſelves, wherein we ſhall not have it in our power to appeal to the deciſion of this judge. Here we muſt reſt ſatisfied with a leſs certain method; our reaſoning muſt now be drawn from Analogy; from ſubjects where we can trace a

degree of ſimilarity, and our concluſions muſt be formed accordingly.

" As a Phyſician," ſays a learned author, " is not always able to chuſe his method of treatment, and as many accidents may occaſionally vary the appearance of a well known diſeaſe, it will be neceſſary to have recourſe to analogy: and how can any man give the neceſſary ſcope to his enquiries on ſuch an occaſion, who is not able from his reading," (his knowledge) " to draw together all the lights, which different authors may afford him on the ſubject?"

ANALOGY, indeed, may not on every occaſion, be a ſafe and unerring guide, nor univerſally afford us confidence of ſucceſs; but ſurely it will be preferable to blind chance, which begets raſh practice!—A ruſh taper is better than total darkneſs.—On the whole, we muſt have a proper notion of the nature of the affection, and the powers

ers to be applied for its removal, before we can venture on rational grounds to attempt a cure.

An Empyric ſays to a perſon with a complaint in the organs of hearing, "Sir, you muſt apply bliſters; I know from experience, they will remove affections of the ears."—If a ſecond conſults him, the ſame remedy is propoſed; and the ſame to a third, a fourth, &c.—for, in fact, he poſſeſſes but one remedy for all the varieties of the diſeaſes of this organ, though ariſing from the moſt oppoſite cauſes; in one, perhaps, from ſome mechanical cauſe, as from Cerumen hardened, and pluging up the meatus; in another, from an inflammation of the membrane lining the ear; in a third, from a carious of the bone of the ear itſelf; and in a fourth, from ſome affection of the portio mollis, or branch of the auditory nerve, that is ſpread over the windings of the cochlea.

It would be abſurd to ſuppoſe in theſe different examples, that one and the ſame method of treatment could ſucceed; nor would any man, informed in his profeſſion, and who had taken pains to inveſtigate the cauſe, ever recommend it. He founds his cure on a knowledge of the parts concerned, and the nature of the affection; and ſhould his practice not ſucceed, he can with tolerable confidence point out the obſtacles to the patient's recovery; or ſhow why the diſeaſe is ſeated beyond medical aſſiſtance.

I entirely agree with an author, often mentioned in theſe pages, when he ſays, "there are certain practitioners more blameable than the empyrics"—The reaſon he gives is, that though they go by the name of regulars, they ſeldom or never employ inveſtigation, or reaſoning on the ſubject of their profeſſion. He continues, "all their ability ſeems to conſiſt in copying formulæ."—Then follows, a few examples,

amples, ſomewhat ſimilar to thoſe already advanced.—" A girl comes to them," he ſays, " with chloroſis, they give her ſome cooling medicine, becauſe there is fever. A pregnant woman complains of retention of urine, and they give a diuretic; they are ignorant that it is the fœtus that preſſes on the neck of the bladder, and that a diuretic may be fatal in ſuch a caſe. Theſe people not only *do not ſee* the chain of circumſtances that occaſion a diſeaſe, but they are ſtrangers to every one of them.—Shall I ſay what I think? the Phyſician who ſees all the circumſtances of a diſeaſe, and he who ſees only a part of them, or rather his own prejudices, muſt neceſſarily be of different opinions; and yet they will all *ſwear* by their *experience*.—A man defends, even to his lateſt moments that which he thinks he has ſeen, without aſking himſelf whether he was capable of ſeeing.—A drunken man ſwears that every thing dances around him; a ſuperſtitious man believes in magic; a little mind dreads apparitions; all theſe

ſpeak

ſpeak from *experience*, fancying that it is from *experience* they have learned all things. The Phyſician who has diſcovered the ways of nature, and follows her in them every day, and the old nurſe who is directed by this Phyſician, both appeal alike to *their experience*, and the former very properly; but ought any one to appeal to his experience who does not poſſeſs a proper talent for obſervation?—Is it by a blind practice, with a few receipts, and many prejudices that we ſee nature?"—certainly not.—She muſt be traced by careful inveſtigation.

It is acknowledged, that many caſes will occur, where we can only apply the means of relief to obviate particular ſymptoms; and where the cauſes of the affection cannot be diſcovered during the patient's life. Our knowledge of the ſtructure and functions of ſome parts of the body is yet in its infancy; we know little of the uſes of the ſpleen, and almoſt as little of the nervous ſyſtem. Perhaps the progreſs of ages

ages in philoſophical inveſtigations, be it ever ſo induſtrious, will fail in finding the cauſes of the various affections of the nerves, of their modification, and manner of operating; or tell with certainty, where the percipient principle has its ſeat, whether diffuſed equally over the whole, or if it places its reſidence in a particular part; or wherein lies that connection ſo intimately uniting the ſoul and body, giving them that reciprocal action which has lately been taken notice of, or how that mutual ſympathy comes to paſs which ſo invariably prevails between them.

THE moſt ignorant Quack, however, reaſons, but he reaſons badly. If the reaſonings of the *ſyſtematic*, with every advantage of education in his favour, fall, and indeed, muſt ſometimes fall ſhort of the truth, what is to be expected from the other?

" BARON

"BARON HALLER informs us that Boerhaave, who even to his ſeventieth year, had, in general, devoted ſixteen hours every day to the ſtudy of his profeſſion, often complained of extreme difficulties, and of people who were daring enough to practice without having ever ſtudied, or reflected in their lives." Reaſoning then, and reflection, I am perſuaded, ſhall be found not only highly neceſſary to the medical practitioner, who wiſhes to be uſeful to ſociety, and an honeſt man, but altogether *indiſpenſable*.

As to moral philoſophy, I mean a knowledge of the operations of the mind; this, and the philoſophy of phyſic, ſeem to be intimately allied in ſome of their parts, and like the ſhades of a picture, ſlide inſenſibly into one another.

WITH reſpect to what ſeems more immediately in the Phyſician's line, no man can, on rational pretenſions, profeſs to remove

move the diſeaſes of the body, who is unacquainted with Pathology; and this muſt lead to the ſtudy of the human ſtructure; he muſt know the functions of the different organs in health, as far as they can be known, before he becomes a judge of the defects he obſerves, or is qualified to attempt a reſtoration of them to their natural condition. Anatomy is the ſtudy of time; it cannot be comprehended without labour and cloſe application. On this the foundation is to be built; it is the ſupport of the future fabric.

In a former part of this work * I have ſpoken more fully of the advantages that reſult to the medical practitioner from his acquaintance with the component parts both of man and other animals; for comparative anatomy is far from being an uſeleſs ſtudy;

* Vid. vol. I. ch. 7.

ſeveral of the parts in other animals can be more particularly traced, and better inveſtigated than the ſame parts can be in man, and analogy will occaſionally teach him to draw the ſame concluſion relative both to the ſimilarity of functions and ſtructure.

In the light of conveying true knowledge to build future practice on, anatomy is one of the principal key ſtones. In the light of conveying a knowledge of the power and wiſdom of omniſcience, the Creator of all things, and proving the exiſtence of an all wiſe, and powerful Firſt Cauſe, it muſt afford one of the moſt ſtriking proofs. Hence it would ſeem impoſſible, that an Anatomiſt can ever be a Polytheiſt, much leſs an Atheiſt.—It teaches us, then, religion, and veneration towards the Supreme Being, while it aſſiſts us in removing the maladies that "*Fleſh* and *Blood* are heirs to?"

Galen, a name well known in phyſic, was a Polytheiſt till he ſtudied anatomy;

my; on conſidering the various uſes of the Hand, and reflecting on the beauty, regularity, and wiſdom of its ſtructure, he was compelled, as it were, to believe in the *one living God.* He called out as he examined it, in a kind of extacy, *Behold! this is the work of works!*—after his converſion, brought to paſs in this manner, he compoſed a Hymn on the ſubject; it conſiſted almoſt entirely of praiſes on the hand, and an enumeration of this part of the human body.

From the ſtudy of the ſtructure, the ſtudent muſt proceed to the uſes of the parts he has thus examined. Phyſiology, a name which has been given to this ſtudy, is no leſs complicated. When we conſider the numerous tubes of various ſizes, ſtructure, and uſes; the different fluids, formed by peculiar organs, and fitted for particular purpoſes; the various glands, with their different ſecretions, all adapted for different ends, and regulated by the juſteſt laws; the more ſolid

parts of the fabric, as the bones, cartilages, tendons, ligaments, &c. for giving ſtrength and motion to the machine; with the manner of their nutrition and natural decay, it will evidently appear, that this ſtudy is none of the leaſt complicated.

PATHOLOGY, or the ſtudy of the deviations of theſe organs from health, muſt be founded on this. When he is well inſtructed here, and in anatomy, he has far from finiſhed his taſk; if he ſtops here, it were as well he had never begun. In comprehending the modes of action of ſeveral of the organs, it will appear how neceſſary a knowledge of natural and experimental philoſophy muſt be.

BEFORE he can comprehend the functions of the Eye, he muſt have previouſly ſtudied the doctrine of light, and colours; and this will require a certain portion of mathematical learning. At firſt view it may ſeem abſurd to maintain, that mathematics are neceſſary

neceſſary to the ſucceſsful practice of medicine; yet this example alone, were we to advance no other, would be ſufficient to prove it.

But the diſeaſes of the Ear are as much the Phyſician's province, as thoſe of the eye; yet before he can obtain a juſt knowledge of this organ, he muſt make himſelf acquainted with the medium through which ſounds are communicated; the properties then of the air muſt therefore be inveſtigated, as far as it is concerned in communicating this ſenſation. This is a branch of natural philoſophy, to which the name of Pneumatics has been given, and is equally as indiſpenſable as the foregoing.

Hydraulics, and Hydroſtatics have, in like manner a reference to the human frame, in as far as the body is a compound of tubes containing circulating fluids, and having a ſimilitude to fluids conveyed through tubes out of the body, making *a*

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due allowance for animate, and inanimate matter, the moving powers, the cohesion of parts, and their viscosity, with their ramifications, angles, friction, and other causes of retardation. This is another wide field, requiring an acquaintance with mathematical, and experimental philosophy.

CHEMISTRY teaches many things respecting the animal machine, as well as the properties of those parts of nature, i. e. those substances, employed in the removal of diseases. Heat is something, without which, in a less or greater degree, animal life cannot for any time exist; chemistry seems to afford us the best knowledge of this. By heat we may be said "to live, breath, and have our being." Besides this, it teaches likewise various other operations, and processes necessary to be investigated by the medical enquirer.

BY chymestry he can give or take away at pleasure, certain properties from substances, which

which enables him to produce particular changes on the human body. We omit mentioning its great utility in the arts, which has rendered life ſo comfortable, being leſs connected with our preſent ſubject. To this part of philoſophy, then, the Phyſician is greatly indebted.

The nature of the Air, alſo in a different ſenſe, from that of conveying ſounds, i. e. in as far as it becomes noxious and wholeſome; or ſalubrious, and vivifying to animal life, is another material branch, a knowledge of which we derive from chemiſtry. It is by this, among other things, we have been able to detect the qualities of the various ſpecies of *Gases*, or elaſtic fluids. We no longer now ſtand in ſtupid wonder at the death of a dog, held over the Grotto del Cani, or ſeem amazed at the noxious effects of the fumes of charcoal, or the dire exhalations that often ſuddenly deprive the unſuſpecting Miner of his life. The nature of fixable and inflammable air is

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at length, by the aſſiſtance of chemical analyſis, and fortunate experiment well known, and has opened another ample field of uſeful inveſtigation.

By the ſame branch of ſcience, in like manner, we obtain information relative to another fluid, not leſs eſſential to the health of the human race; I mean Water. If the various changes of the air materially affect the living body, the various admixtures found in this Element, as well as the many ſpecies of which from this cauſe it conſiſts, have no leſs a ſhare in producing noxious or ſalutary effects. By chemiſtry, we can make it our antidote or our poiſon; it detects the principles on which theſe depend, and compounds, or decompounds it at the Phyſician's will, rendering it ſubſervient to his intentions. This is an extenſive ſtudy; but without a competent idea of it, how limited, how imperfect muſt be the medical practioner's ſkill!

FROM a knowledge of the effects of heat and moiſture on the human body, when conjoined, he learns the remote cauſes of ſeveral fatal diſeaſes; he reaſons on the ſedative powers of contagion, and becomes the better enabled from ſuch inveſtigations to apply his method of cure.

MANY of the changes in the vegetable world, ſeem likewiſe to be produced by chemycal laws *. With this aſſiſtant we can

* A late writer of reſpectable abilities, in an eſſay on the ſtudy of natural hiſtory, complains that not only Mineralogy, but Chymiſtry, is leſs attended to with us, than with ſeveral of the neighbouring nations. In Sweden and Germany, Mineralogy forms a diſtinct and honourable profeſſion, like the Divine, the Phyſician, or the Barriſter. In theſe countries they have colleges for regularly teaching it. The Ruſſians and Spaniards have lately adopted this plan; the French, likewiſe, have formed a Mineralogical School at Paris; and perſons are employed in tracing ſubterraneous maps of the whole kingdom of France, and Mineralogical

diſcover ſeveral of the properties of plants; we can ſeparate their parts, and reject or

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logical voyages have been taken at the public expence; yet England has paid, hitherto, little attention, comparatively, to this ſtudy. Though our own country is allowed to be richer than France in mineral productions; it has been chiefly confined to a few gentlemen of the medical profeſſion *. "Even chymiſty," ſays he, "which we ſhall attempt to ſhow is the parent of Mineralogy, has ſcarcely been attended to in England, whilſt neighbouring nations have purſued it with enthuſiaſtical ardor. It forms the favourite occupation, and moſt faſhionable object of attention, not only of the middling, but even of ſome of the higheſt ranks of ſociety."—Amongſt theſe, ſays Mr. Kirwan, we may reckon in Ruſſia, Prince Gallitzen; in Germany, Count Sickengen; in Italy, the Counts de Saluces, de Morrozo, and the Marquis de Gironi, governor of Leghorn; in Geneva, Mr. de Sauſſure; in France, the Dukes de Chaulnes, Rochefoucault, and D'Ayen; the Counts de Lauraguais, la Geray, Milly, Treſſan, and De-la-Tour d'Auvergne; the Marquiſſes d' Courtenvaux, and de Courtinvron; the Barons d' Olbach, and de Servieres; Meſſieurs Tru-

* Vid. Kirwan's Elem. of Min. p. 28.

daine,

chuſe that which ſuites beſt with our intentions.

A KNOWLEDGE of this part of nature makes another branch of medical ſcience. Many of the articles uſed by the practitioner are derived from the vegetable world. Botany, therefore, or a knowledge of plants, whether reſpecting their external figure, or internal qualities, cannot be diſpenſed with by the ſcientific Phyſician. Under this head I comprehend that ſtudy, known by the name of Materia Medica, which teaches the manner of preparing the

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daine, Lavoiſier, Montigny, de Morveau; and among the Ladies, Madame la Preſidente d'Arconville: to this liſt we may add the Earl Dondonald, in Scotland, and Mr. Kirwan in England *;" ſeveral others in Great Britain may certainly be added to theſe two gentlemen, though they may not appear among the moſt conſpicuous.

* Dr. Kentiſh, on Nat. Hiſt.

ſubſtances obtained from the vegetable world, for medical purpoſes, and point out the inequalities, or the doſes in which they are to be exhibited. The former leads him, as it were, by the hand to the plant; the latter prepares it for exhibition. This is a branch of uſeful ſtudy, and one, which unluckily, is by the generality, even of ſenſible, and otherwiſe literary practitioners of late years, too much over-looked; I mean the Materia Medica. For botany, as an amuſing part of ſcience, is more attended to.

The ſtudy of the vegetable kingdom, in another view, is not only curious, but highly intereſting; it enlarges our ideas with regard to the operations of nature, and conducts us forwards in the ſcale of ſcience. Till lately this branch alſo was little cultivated; but ſince philoſophers have turned their attention this way, every day's experience proves more and more its conſequence to the exiſtence of life. We are not only ſupplied from thence with food

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and medicine, but it has its effects in a ſpecial degree on the atmoſphere with which we are ſurrounded; it ſeems to be the chief reſtorer of the ſalutary quality of the air. After it has been rendered noxious by various phlogiſtic proceſſes, it dephlogiſticates, and renders it once more fit for reſpiration; it drinks up, and is even nouriſhed by what would deſtroy man, and returns it to him again, like gold, as it were, from the refiner's furnace, new combined, and new modified. Here we find putridity has its uſe, and through the medium of the vegetable kingdom, becomes the foundation "of that which is pure." This is a beautiful link in the laws of the creation, and the exiſtence of the world. It is a law founded on wiſdom ſupreme, that as ſoon as one principle becomes unfit for certain uſes, it is only then rendered fit for its deſtined functions in another part; here is order ſpringing from confuſion, and beauty from deformity. It is the work of God!—

I NEED not mention here the mineral kingdom; it is evident the medical enquirer muſt not overlook its inveſtigation, ſince it affords him ſeveral of the moſt powerful of thoſe articles by which he effects his purpoſes. This is alſo a branch which will require his attention; but, perhaps, this may be in a great meaſure comprehended under the head of chemyſtry, which we have already endeavoured to point out as an indiſpenſible ſtudy.

NATURAL hiſtory he will likewiſe find of importance; it will aſſiſt in explaining ſeveral of the operations of nature, and farther enlarge his ideas. I mean ſomething more by it however than a mere arrangement and claſification of the different articles uſually comprehended under this term. He muſt inveſtigate the cauſe that gave exiſtence to many of theſe productions. This may lead him to conſider the formation, not only of the productions of the earth, but the earth itſelf. It will teach

teach him in a more medical view, both the animals and the climates, each claſs inhabits, with ſomething of their variety and nature.

In a word, as all the parts of ſcience have a relation to one another, and all ultimately aſſiſting in explaining the properties of animal life, and the diſeaſes to which every thing "that breathes the breath of life" is ſubjected, it behoves him who is engaged in the removal of them, and profeſſes to alleviate the tortures of pain, to be duly converſant with all. But as the life of man is ſo limited, and the various ſtudies mentioned ſo complicated, that the longeſt period of mortality is far too ſhort for the intimate comprehenſion of the whole, a general, or more ſuperficial knowledge is all he can aim at, is all he can hope to attain.

In our proceedings here, however, we ought always to beſtow more time and attention

tention on thoſe branches that have a nearer relation to the chief point, than to others, which are ſecondary only, and may be called more ornamental than uſeful; hence I have paſſed over ſeveral, that if a medical man has leiſure to cultivate, it will be well for him to purſue.

ELECTRICITY we have already mentioned; but it is more than one of thoſe ornamental branches; it is among the indiſpenſable parts of a Phyſician's education; and this will readily be granted, when, not only the principal rank it holds in the univerſe, and its great agency in nature, but even its application more immediately to the diſeaſes of the body, are conſidered.

NOSOLOGY I have likewiſe left untouched, a ſtudy however, which the Phyſician will find of no ſmall importance in his diſtinction of the various maladies incident to man. To find out the diſeaſe under which our patient labours, is one great

great ſtep towards the cure, and one not, on all occaſions, eaſily attainable; it is the province of noſology to teach this, as it enumerates the leading ſymptoms that characteriſe it.

And notwithſtanding what ſome even of the learned ſay of its inutility, I mean, of dividing diſeaſes by its aſſiſtance into claſſical order, I am perſuaded, it will be found of no little moment to the practitioner at the bed ſide of his patient. The ſtudent will certainly find his account in it; his memory will be aſſiſted by a noſological arrangement. Hold it in the light of only a common-place book, and its uſefulneſs muſt be manifeſt; but it will do more, it will be found applicable in practice.

Diseases are ſometimes as truly marked, as the writers on this ſubject have repreſented them. Syſtematic arrangements have proved uſeful to the progreſs of botanical ſtudies, and in other branches of natural hiſ-

tory, and I can find no ſufficient arguments for rejecting them in medicine. I am inclined indeed to conſider them as equally advantageous there.

The doſing of medicines, which is termed *Poſology*, demands alſo the medical man's conſideration; ſomething has already been advanced on it in a former part of theſe obſervations *. To learn the more common doſes of the various articles exhibited in diſeaſes, as they are given in different authors, will require attention and time. To know this branch as far as books can teach it is neceſſary; but no book can lay down infallible rules here. All they can do is, to inform us of the quantities that have been exhibited. The different articles in uſe become different medicines, according to the quantities, and the time

* Vid. vol. I. ch. 6.

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in which they are adminiſtered. Thus, ipecacoanha given in a ſmall quantity will prove cathartic; and in a larger, emetic. Rheubarb in ſmall quantities becomes aſtringent, if given at proper intervals; in larger, it purges. &c.—The knowledge then of the doſe muſt depend on a knowledge of the affection, and on proper views of the animal œconomy, with a knowledge of the idioſyncraſy, and preſent ſtrength of the habit; from which it muſt appear, that no general rules can hold good, but that the doſe muſt be varied as exigencies require, to bring the diſeaſe to a termination; all which muſt be calculated at the bedſide of the patient, and the quantity adapted for the preſent individual, and the preſent moment of that individual's complaint.

After what has been ſaid on the foregoing ſubjects, it will be unneceſſary to mention regimen in diſeaſes, as a knowledge of it is founded, like the doſeing of

 medicines,

medicines, on a knowledge of theſe. It is a part, however, that ought to be conſidered of more importance in reſtoring the ſick, and valetudinarian to health, than I fear, is generally done. There is no part of the ſcience of healing, wherein a man ſhows his judgment more, than in the regimen he lays down for his patient. In moſt of the chronic diſeaſes, and theſe are very numerous, he can do as much, if not more by this, than by his preſcriptions made up at the apothecary's ſhop. But to bring to paſs the great end in view, both muſt be judiciouſly united.

By regimen, I not only comprehend diet, i. e. meat and drink; but the ſtate and temperature of the air, cloathing, exerciſe, ſleep, and watching; the juſt regulation of the ſecretions, and excretions, and in a word, "quid ferant vires, et quid non."—In this the former habits of the patient are carefully to be conſidered. Much might be written on the ſubject of regi-

men;

men; but it is not our buſineſs to enter any farther into it here, than juſt to point it out to the medical practitioner's notice, as being a part comprehended in his medical education.

THOUGH bathing be none of the articles which can be noticed in a pharmacopæia, it may nevertheleſs be termed an active medicine, and one from which, much good, or much ill may accrue, according as it is applied. I know not whether it can be ranked in the claſs with thoſe things we more ſtrictly call *regimen*. But rank it where you will, it demands attention, and no ſmall ſhare of judgement to adviſe it with propriety, and modify it with medical diſcernment.

NOTHING, now-a-days, is more common than bathing, and no part of medicine, perhaps, more indiſcriminately, and, it is to be feared, more injudiciouſly, in the greater number of inſtances, made uſe of.

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This will be ſufficiently proved, from the promiſcuous uſe of *evacuations* recommended to bathers, previous to their going into the bath. If the caſe be ſuch as is proper for bathing, it muſt be ſuch as excludes all debilitating cauſes; and ſurely purging, called, for I know not what reaſon, *preparation* for bathing and drinking the waters, is one of the moſt powerful. Both bathing and drinking are tonic powers, the latter gently ſtimulating and invigorating the habit, and the diſeaſes requiring them are conſequently thoſe of debility; it muſt appear, then, that this debilitating courſe muſt be contrary to juſt reaſon, and true medical philoſophy. But to know when, and how to apply theſe, like regimen, requires a previous acquaintance with the animal œconomy in all its parts, and a knowledge of the diſeaſes then under conſideration. Much may depend on the regulating the temperature of the water; the preſent ſtrength of the habit; the time of the day for

for bathing; the length of time to continue in the water; whether the patient ſhould bathe early in the morning, and with an empty ſtomach, or if a certain quantity of food ſhould be allowed; how often he ſhould go into the water in a given time; all demand ſerious reflection. An error in theſe muſt tend to the patient's hurt inſtead of his welfare. On this part, alſo, much might be ſaid, but it does not in this place fall any farther under our cognizance, than to point it out as highly deſerving the medical philoſopher's notice, and ſhowing him the importance of its conſideration in the courſe of his ſtudies.

I HAVE hitherto ſaid nothing relative to Languages. In a Phyſician, a claſſical education is altogether indiſpenſable; but this we have always ſuppoſed a point incontrovertible, and that the ſtudent is well acquainted therewith, before he enters on the more material parts of his medical education.

cation. For though languages may only be conſidered by many as the ſhell, the external cruſt of education, which teaches words without ideas, ſounds without things, yet before we can with advantage proceed farther, it is incumbent on us to penetrate here. Our literature muſt be greatly confined, if we can only read philoſophy in our native tongue; and though we may at length learn by tranſlations, yet it will come late; half the world will have the ſtart of us: like a lame horſe we may hobble after, but we can never come up with the chace.

Some of the modern languages are almoſt indiſpenſable to the Phyſician. French is not only the polite, but almoſt the univerſal language of Europe, both with the philoſopher and the gentleman. "By a proficiency in languages, other ſtudies are with more facility acquired." One of which never, on any pretence whatever to be omitted, is Latin. This, though a dead

a dead language, " ſpeaketh to all men." It is more particularly the language of philoſophers than any other; every medical author, almoſt, who wiſhes his labours to extend, ſends them into the world in this dreſs. This we find often practiſed in Britain, as well as on the Continent; nor is it a ſuperficial knowledge of it, medical men ought to poſſeſs; they ought to have a critical diſcernment of its beauties; for as they ſhould ſpeak it with ſome fluency, ſo they ſhould write it with tolerable correctneſs, neither of which can be well performed, unleſs their proficiency in it has been carried thus far.

ALTHOUGH we have few authors in Greek, of much importance, (for the works of the antient phyſicians, even of Hypocrates, are not at this improved period of medical knowledge held in ſo great eſteem as heretofore, ſince the introduction of experiment in this ſcience) yet this language ſhould by no means be overlooked.

Many Greek phraſes are to this day retained; many of the names in uſe, both in chemyſtry and anatomy, as well as in other branches of philoſophy, are derived from thence; and to be unacquainted with their origin, would be unpardonable.

FROM what has been ſaid, it will appear, that he who turns his attention to the practice of phyſic, ſhould begin at an early period of his life to direct his ſtudies to this end, ſince an education, ſo large, ſo extended is required, before his purpoſes can be properly accompliſhed *.

* The genius, and induſtrious application of ſome men will make amends for deficiencies here. Boerhaave, was upwards of thirty when he turned his thoughts to the ſtudy of which we are ſpeaking. It was ſeldom, however, he laboured leſs, as has already been ſaid, than ſixteen hours a day, throughout the greater part of his life after. He was bred indeed to the church, and had more than a ſuperficial idea of ſchool

BESIDES, the mind is then retentive of impreſſions, and if well directed, will afterwards proceed in the proper path; or to uſe the words of a modern poet, ſpeaking of the importance of youth well directed, in forming the learned as well as the virtuous man *.

'Tis granted, and no plainer truth appears,
Our moſt important are our early years;
The mind impreſſible, and ſoft, with eaſe,
Imbibes, and copies what ſhe hears and ſees;
And thro' life's labyrinth holds faſt the clue,
That education gave her, falſe, or true.

WHEN a man has finiſhed what is called a liberal courſe of ſtudies, a polite education, ſuch as entitles him to a Maſter of Arts Degree, he is only *then*, and not before, properly qualified to enter on the more

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ſchool and univerſity knowledge; hence his preliminary education was claſſical and complete.

* Cooper's Poems. Vol. I. p. 59.

extended ſtudy of medicine, which ranges in a yet wider ſphere, turning its views to all nature.

NAY, it is the opinion of a learned author, that to complete the education of a Phyſician properly, an education extenſive beyond all others whatever, he ſhould poſſeſs a tolerable notion of the law—and "this," he adds, "to complete the character of general and extenſive knowledge; a character which their "(Phyſicians)" profeſſion, beyond others, has remarkably deſerved *."

SUCH is the outline of a Phyſician's education; ſuch is the great objects he has to graſp at; ſuch his education ought to be; and ſuch, we hope, it is for the moſt part found.

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* Vid. Blackſtone's Comm. on the Laws of England. Vol. I.

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A RECOMMENDATION, comprehending ſo many objects, and ſome of them that may ſeem, at firſt ſight, altogether foreign to the ſcience we have chiefly in purſuit, will be little reliſhed by thoſe, if any there are, who may think a few months of one or two winters at the lectures of ſome medical teachers, whether in the metropolis, or an univerſity, with a few years of an apprenticeſhip in ſome apothecary's ſhop, are ſufficient credentials to recommend them, as able practitioners, to the notice of the public.—The credulity of our countrymen, too often leads them to believe ſo,—a credulity, which one would ſuppoſe endemial to Great Britain, and ſome of her appendages; for it is in theſe only, of almoſt all other parts of Europe, where empyriciſm and credulity of this nature ſeem to hold their ſovereign ſway.

"THE Phyſicians in Chili," we are told, "blow around the beds of their patients, to drive away diſeaſes.—The people there

there think that phyſic conſiſts wholly in this wind; and their *Doctors* would take it very ill of any body, who ſhould attempt to make the method of cure more difficult. —They think they know enough, when they know how to blow *."

But it will be ſaid, what has all this to do with regimental Surgeons? our buſineſs, in theſe pages, was not to diſplay the qualifications neceſſary for the Phyſician, but to point out the duties of the regimental practitioner. The more obvious parts of education, it will be ſaid, are ſufficient for him, ſince his buſineſs is more with external, than internal diſeaſes.

May it not be expedient to enquire into the truth of this poſition, and ex-

* Vid. Zimmerman.

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amine whether a regimental practice partakes moſt of phyſic, or, of what is commonly called ſurgery?

Something has already been ſaid on the ſubject, and when every circumſtance is maturely weighed, it muſt only ſerve farther to confirm, that the regimental practice requires more of the Phyſician's than the Surgeon's aſſiſtance; it muſt therefore follow, that the place ſhould be ſupplied, not out of the number of the latter, as is moſt commonly done, but from the former; and on this ground, the ſketch we have offered of a Phyſician's education is tenable.

On examining the diſeaſes that are moſt prevalent among ſoldiers, and in regimental practice we find the far greater number of them, ſuch as fall under this particular province.

The following may be enumerated among the Pyrexia. Fevers of all the different kinds. Typhus, Sunochus, Intermittents, and all their variations, as remittents, &c. every one knows the attention we ought to pay to the claſs of fevers; they appear, at leaſt, three times for once of moſt other diſeaſes, and prove as often fatal. Among the Phlegmaſia, we may reckon Ophthalmia, and even Phrenitis; this may, and does ariſe in the army, from too much expoſure to the rays of the ſun, or what is termed Inſolation. Cynanche tonſillaris; Cynanch. maligna, a very fatal, and no infrequent diſeaſe. Cynanche Parotidea, Cyn. Pharyngea. I paſs over the Cyn. Trachealis, or Croup, as leſs frequent and more ſubject to children. Peripneumonia, Pleuritis, both frequent in the army. Gaſtritis, Enteritis, Nephritis, Rheumatiſmus, both of the acute and chronic ſpecies. As this diſorder always ariſes from cold, and as the nature of a ſoldier's life is well underſtood, I need not

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ſay how frequently it is to be met with amongſt ſoldiers.

Of the Exanthemata, we may enumerate the following; Eryſipelas, Variola, Rubeola, Scarlatina: I paſs over the miliary fever. Among the Hæmorrhagies, Epiſtaxis, Hæmoptyſis, and its ſequela Conſumption, another diſeaſe very frequent, and almoſt always fatal. I ſay almoſt *always* fatal; for by the preſent faſhionable modes of life, irregularities, and late hours, &c. it is often induced, and but ſeldom we find it cured. As the important part in the obviating, or removing of all diſeaſes, is the beginning; and as this complaint, particularly, creeps on ſlowly, and without giving ſuch uneaſineſs as to create alarm to the patient, it has generally arrived to a growth, difficult by the moſt judicious treatment to be ſtopped, before any aſſiſtance from the faculty is ſought for, and is, I fear, too often confirmed and rendered paſt remedy, by the injudicious

treatment that many of theſe unfortunate patients experience from thoſe into whoſe hands they reſign themſelves. Indiſcriminate bleeding, purging, and a low diet, are the means in general uſe, even among the greater number of the regular and well-informed practitioners.

" Miſtakes in medicine always entail miſchief. The danger of bad treatment never appeared more fully than in that dreadful endemic, of this iſland, the Pulmonary Conſumption. Thouſands have been literally ſent to the grave by the lancet and low diet. And innocent as milk may be, it has in the hands of medical men, been converted into a moſt deſtructive poiſon. Falſe notions of nouriſhment have given riſe to falſe medical practice; and practitioners have imagined that they were ſupporting their patient, whilſt they were feeding his complaint *." This is

* Dr. Kentiſh.

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a diſeaſe, wherein regimen in all its parts ſtrictly adhered to, and judiciouſly laid down, in which I include a *nice attention* to the temperature of the air, and its ſalubrity, can do more than all the drugs ever adminiſtered in it.

" MEDICINE is but a ſecondary aid—a ſubſtitute for the natural powers of food, of diet, and of regimen.—Unhappily, however, Phyſicians, have reverſed the view, and, inſtead of conſidering, that the exiſtence of the body in diſeaſe, as well as in health, is ſupported by the ſame agents, they have ſought for the cure of diſeaſe on different principles—they have ranſacked the three kingdoms of nature, and laboured in the very elements for their imaginary powers of phyſic—with what ſucceſs the preſent ſtate of practice, and uncertainty of cure, can tell.—I mean not," continues this author, " by theſe obſervations to debaſe my profeſſion—on the contrary, I mean to inſiſt upon an impor-

tant truth, and wiſh to turn the attention of patients and Phyſicians to their proper objects.—If both do not attend alike to the habits of life, neither can be benefited; the patient cannot derive relief, nor the Phyſician credit.—When we act in concert with nature, we have much in our power—when we contradict her indications, all is miſchief."—Many obſervations might be made on the preſent mode of treating Conſumption, but this cannot be entered on here. That it is a diſeaſe frequently occuring in the army, and requiring the ableſt of the profeſſion, whoſe exertions even too often fail, is all we want to eſtabliſh.

But to return;—Cyſtirrhagia, Hæmaturia, Hæmatemeſis, fall likewiſe under the Phyſician's department; and among the Profluvia, Dyſenteria, and Catarrhus, both chronic and acute; here, I alſo place that infectious ſpecies called Influenza, on

which

which the reader will find a few obſervations, ſubſequent to this chapter.

Among the Neuroſes, Paralyſis; Syncope; Epilepſia; all which frequently take place; palpitatio—Aſthma; I paſs over Hypochondriaſis and Dyſpepſia, as rarely occurring. Pertuſſis ſometimes occurs; Colica often, and is never without danger; Cholera; Diarrhea; which as often prove troubleſome.

Among the Cachexiæ, I have met Atrophia in the army. Among the Aquoſæ, Anaſarca; Aſcites; Hydrothorax. Among the Impetigines, Scrophula; Syphilis. This laſt, as may be ſuppoſed, from the unreſtrained uſe of unclean women, is very frequent. Scorbutus is likewiſe to be found in the army as well as at ſea; it may happen even in England. During the war preceding the laſt, it appeared among the French priſoners at Wincheſter, with all its malignity, though they had been four

four or five years at ſo great a diſtance from the ſea coaſt *. It appears very frequently in beſieged towns; for example, at Minorca, in the late war, and ſeems to have been one of the chief cauſes of the ſurrender of the troops to the enemy. Lepra likewiſe appears, and Icterus, which I have often met with.

Among the Locales, we may place Gonorrhea, one of the moſt frequent, and in general moſt troubleſome in the army, as are all venereal complaints; and alſo among the worſt cured, though almoſt every one pretends to a knowledge of them. We meet alſo Obſtipatio, Iſchuria, Herpes, Tinea. I place Bubo among the venereal complaints. Theſe are enumerated as the moſt frequent in the army; many are omitted which may occur occaſionally.

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* Vid. Brockleſby on Milit. Diſ.

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To ballance them, let us enquire what diſeaſes appear in regimental practice, more immediately requiring the Surgeon's aſſiſtance. With reſpect to the pure ſurgical caſes that occur in regimental practice, they are for the moſt part, neither many nor of a complicated or difficult nature. Now and then a phlegmon, ulcers, and ulcuſcula; by theſe I mean trifling ulcers, that require very little medical, or ſurgical treatment. Small wounds; for it is ſeldom that large wounds occur; theſe may be ſlight cuts on the fingers, and contuſions on the head. Sprains of the ancles, wriſts, and ſhoulders; diſlocations; but theſe laſt are what, I believe, ſeldom happen; yet, ſince they may, we ſhall give them a place. Among the Ectopiæ, Hernia; this again, if it does occur, which I acknowledge to have ſometimes ſeen, is a complaint of ſuch a nature, that it totally diſables the man, ſo affected, from the ſervice. And hence ſuch are always diſcharged, unleſs it happens to Taylors, when they are kept

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for the purpoſe only of working in the regimental ſhop. Sometimes, among the ſurgical complaints, we find Hydrocele, alſo Schirrus, particularly in the teſticles.

For the moſt part, neither wounds of the head are found ſo dangerous as to indicate the uſe of the trepan; nor wounds of the extremities ſo large as to require amputation, ever occur; now and then a broken leg, from a fall may happen. Large wounds happen often enough, we confeſs, after battles, but we have already mentioned how ſeldom battles on land are fought of any conſequence, or magnitude; I mean where much of this practice is neceſſary. A Bunker's Hill battle does not take place every war. In long continued ſieges they are to be found; yet the number of ſick, from the beginning of the ſiege of Gibraltar, till its concluſion, have not been many, when we conſider the number of regiments, and of Surgeons that were ſtationed

tioned there. From this view, we may learn how much more neceſſary Phyſicians in regimental practice are, than Surgeons, ſtrictly ſo called.

In the war before our late unhappy and ill-judged conteſt with our American kindred, it appears from regiſters kept of the mortality produced by fevers of various kinds in military life, that eight times more men have been loſt by theſe, than fell immediately by their wounds, or in battle. This is a farther proof how neceſſary Phyſicians are; yet medical ſcience continues to be much depreciated, and even thought unneceſſary; while the department has been conſtantly conſigned to the loweſt ſphere of the healing art *.

* Vid. Mil. Diſ. by Brockleſby.

SURGERY and Phyſic are held diſtinct; this is univerſally granted by the diſtinct incorporated ſocieties into which the two branches are ſeparated; and what is of more importance, the education in many reſpects differs. The Surgeon generally contents himſelf with a much more circumſcribed plan.

I KNOW a late writer has doubted the propriety of diſtinguiſhing them into two ſeparate branches; but till he can change the mode of education; till he can bring the Surgeon to ſpend the ſame length of time in ſtudy, that the Phyſician is obliged to ſpend in college before he be licenſed; and till examinations be equally ſtrict, and on the ſame ſubjects, it will be in vain to conſider them as one and the ſame; and to conclude that every man who can dreſs a ſimple wound, or make a few unguents, is equally capable of ſuperintending fevers and the other diſeaſes of the ſyſtem which we meet with in the army, would be as abſurd.

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THE generality of what are called Surgeons, i. e. who ſtile themſelves ſuch, are contented with ſerving an apprenticeſhip of a few years; then go to London or Edinburgh a few months, in winter, to walk the hoſpitals; return home and ſet up for themſelves; and this forms the whole of their medical education*; the greater number never offering themſelves as candidates for a Diploma in the branch they profeſs, as will appear by the ſmall liſt of examined Surgeons publiſhed by authority from Surgeon's Hall.

BEFORE I finiſh this head, I think it may not be out of place to mention the

* In Ireland it is even more imperfect. What is ſtiled a regular Surgeon in Dublin, where the beſt in the kingdom are ſuppoſed to reſide, only ſerve an apprenticeſhip to ſome Surgeon in the Metropolis. Many, however, go now to Edinburgh from Ireland, to purſue their ſtudies.

preliminary education of ſuch as intend to ſtudy ſurgery, which is required by one of our continental powers; and if it be contraſted with the little attention that is generally beſtowed on this part among us, I fear the compariſon will be conſiderably againſt Great Britain, notwithſtanding the fame ſhe has juſtly acquired for her medical erudition. I ſhall give the account as I find it.

"MADRID, May 4, 1787.—The King has approved of the eſtabliſhment of a College of Surgery, in this capital, under the name of St. Charles, and under the immediate protection of the Royal Council, ſimilar to thoſe of Cadiz and Barcelona. This college will be compoſed of a Preſident, eight Profeſſors, and a Diſſector of diſtinguiſhed merit, elected from the number of thoſe who travel at the Royal expence, for knowledge and improvement in the art of ſurgery. This ſchool will admit *none* but thoſe who are furniſhed with

with certificates of their having ſtudied Humanity, Logic, Algebra, Geometry, and Experimental Philoſophy for a due time. Thoſe certificates, beſides warranting the life and manners of pupils, muſt contain the names of parents, place of birth, and be ſigned by Curates."

HERE is an education becoming and proper; and a man ſtudying ſurgery on ſuch a foundation muſt practice with credit, provided he has been bleſſed with a due ſhare of genius to improve by his opportunities; for it is both theſe united, that forms the man of profeſſional ſkill. We ſo far agree, however, with the poet, that,

" Tho' nature weigh our talents, and diſpenſe,
" To every man his modicum of ſenſe,
" Yet much depends, as in the Tiller's toil,
" On culture, and the ſowing of the ſoil *."——

* Cowper's Poems. Vol. I. p. 212.

I KNOW

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en liberally ſtudied, is as com-
plicated in ſome of its parts as the Phy-
ſician's; and requires both genius, appli-
cation, and much reading; but the num-
bers that ſtudy it in this extended ſenſe
are few, when compared to the number of
ſuch as we hinted at above. Suppoſe ſurgi-
cal caſes to be far more frequent than we
find them in regimental practice, they are
ſtill few, and the treatment eaſy and ſim-
ple, when compared to the diſeaſes that
belong properly to the care of the Phyſi-
cian. Soldiers, whether in peace or war,
are every day of their lives expoſed to the
cauſes of the one; i. e. to what induce
thoſe diſeaſes, we have ranked under the
medical head; while on the other hand,
they may not be expoſed once in a life
time to that of the other.

What has already been ſaid to prove
that the practice requires more of the Phy-
ſician's than the Surgeon's aid, we appre-
hend

hend is ſufficient to convince our readers of its truth; but it will appear ſtill farther from the following fact, which, indeed, the public have been in poſſeſſion of theſe twenty years. I quote it from an author who wrote ſo long ago as 1764, and who likewiſe touched on the ſame ſubject, and hence I am happy to have his teſtimony to corroborate my own opinion, that the regimental practice belongs more to the Phyſician than the Surgeon, or to uſe his words, "more than mechanical dexterity in dreſſing a wound, or even of cutting off of a limb."—"The fact," ſays he, "was well vouched to me by a very ingenious and worthy man, who was ſeven years Surgeon to a regiment in the late war," (i. e. in the war preceding our laſt) "during which, the corps had been two campaigns on very hard ſervice, and had alſo ſuſtained the ſevereſt ſhocks and loſſes which attended the tedious ſiege of the Havannah, yet the Surgeon declares, that in full ſeven years, he had not met with a hundred, properly, chirugical

chirurgical caſes in the whole regiment, though, in the courſe of that time, near two thouſand men had gone through the regimental books, including 400 men draughted out of it into different corps."— "May we not then juſtly conclude," he goes on, "that in time of profound peace, the exigences of chirurgical dexterity compared to the objects of medical attention in any regiment, are at moſt one half leſs than they had been obſerved at two battles and a ſiege, beſides the reſt of the ſeven years; conſequently, that the medical ſcience requiſite for a regiment is at leaſt forty times more neceſſary to be in ſome meaſure practiſed, for once that any particular dexterity in manual operation, or ſurgery is required *."

* Vid. Mil. Diſ. by Brockleſby.

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THIS granted then, which cannot be denied, is it not ſtrange, that the army ſhould be ſupplied with ſo few of the one profeſſion, though their aſſiſtance be ſo frequently wanted, and with ſo many of the other branch, though there be in general ſo little need for operations in military practice, or of their aſſiſtance in other diſeaſes, where it becomes their province to act?

HOWEVER the preſent age may boaſt of literature and refinement; however, we may hold ourſelves in high eſtimation above the antients, both in reſpect of knowledge in war and philoſophy, yet they ſeem to have taken a greater advantage of the ſcience they poſſeſſed, and no doubt, reaped, as the fruits thereof, a proportionable ſucceſs. Xenophon, in his hiſtory of Cyrus *, a general, who in the eſtimation of this hiſtorian, was the ableſt of all an-

* Vid. Xenoph. de Inſt. Cyr. Hiſt. lib. 8. p. 167.

tiquity, mentions, among his other qualifications for a general, that previous to a war, he wiſely choſe able Phyſicians, for the management of the ſick, and diſmiſſed them afterwards with honours, as well as with the rewards earned by their ſervices. It were well, if Britain copied his example: but it is too notorious how little attention is paid to this ſubject; an over negligence both in choice, and in rewards, would ſeem a reproach on us. The ſmall, and inadequate pay is a ſufficient proof of this; or, their diſmiſſion at the end of a war without any proviſion whatever. The naval medical gentlemen will join me in the obſervation, and corroborate the aſſertion; more than two thirds of whom are then turned adrift; the militia practitioners will confirm it likewiſe, who, though they have ſerved the whole duration of a war, be it ever ſo long, are ſimilarly treated, and unregardedly diſcarded; and the regimental Mates, in the regular ſervice, will alſo unite their teſtimony.

But to return; the few Phyſicians that are appointed to the ſervice, are ſeldom convenient to give their advice in medical caſes, except, immediately, in the places where they remain. Such as at ſieges *, and large Encampments, where a general hoſpital is formed, there we find a Phyſician. During a period, perhaps, of twelve or more years, an army Phyſician never ſees a regiment till it be brought to form part of an Encampment. Does it ſtand in no need of a Phyſician all this time? Is his utility only to continue a few ſummer months, during an encampment, and ſolely in time of war! Strange ſuppoſition! This is placing great confidence in the abilities of regimental Surgeons. Surely we

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* Sieges are often very healthy. On the 24th of July, 1782, there was in Gibraltar 7234 privates; the number of ſick was only 265; and, ſome of theſe, we are told, appeared in the ranks occaſionally.

General Evening Poſt, Oct. 5, 1782.

would be apt to conclude that their capacities muſt be well known to Government, before ſuch important charges could for ſo long a time be committed entirely, and without controul, to their diſpoſal.

It will be ſaid, there is a Surgeon-general to inſpect the conduct of theſe gentlemen; but it is as ſeldom he viſits regiments; nor, indeed, would it be poſſible for him, ſcattered, as regiments muſt be, overſo large an extent of country. In ſummer he pays a formal viſit to each Encampment, and in each regimental hoſpital, if there be no general one, he ſtays a few minutes; but he is never ſeen more during the campaign. All this might be eaſily rectified, either by ſuch a method as we have already ventured to point out, or ſome other which the wiſdom of Government might deviſe.

It may be objected here to my recommendation of Phyſicians in place of Surgeons, for regimental practice; that I am

contending more for a ſhadow than a ſubſtance; for a name than a reality. Far be this from me! It is the ſame thing, as to the effect, by what name they go; whether by that of Phyſician, or Surgeon, provided they be men of ſenſe, and knowledge in their profeſſion. Names can never change things; they can never change a Phyſician to a Quack; nor a ſkilful Surgeon to a Mechanic, though all the world, in common converſation, ſhould denominate them ſo.

"What is a name?" ſays the Poet,
——"That which we call a roſe, by any
Other name wou'd ſmell as ſweet, ſo Romeo
Wou'd, were he not Romeo call'd.

And ſo will a man of medical knowledge, be ſtill a man of medical knowledge, let him be called by what title the world pleaſes. But I do contend that he ſhould poſſeſs the education of a Phyſician; and of courſe, it were better if he had a Phyſician's diploma in preference to a Surgeon's, ſince the examinations that obtain them

them are on different ſubjects, and require a different direction of ſtudies.

It is well known, that whoever ſtudies medicine, ſtudies at the ſame time the ſcientific parts of ſurgery, and is equally ſkilled in it with him who calls himſelf a ſurgeon, except in handling the knife. With this it is not his province to interfere, as it would intrude too much on the profeſſion of his brother; but if engaged in regimental practice it may occaſionally be neceſſary that he ſhould practice operations. It is abſolutely incumbent on the Phyſician to acquire this knowledge in ſurgery, becauſe he is frequently called where a great part of the complaint is ſurgical, and has beſides, repeated opportunities of ſeeing operations.

In ſuch caſes, his opinion reſpecting the health of the ſyſtem is required, and according to it the Surgeon acts, whether it be to operate or not; but it is not equally neceſſary for the Surgeon to ſtudy the practice

tice of medicine. With anatomy both ought to be well acquainted, but both not always with phiſiology, general pathology, and thoſe branches mentioned above. Nor is it abſolutely required from the Surgeon to ſtudy the Materia Medica, except ſo far as reſpects plaiſters, unguents, fotuſes, and and the like. While I ſay this, I do not mean that they are, in general, found unacquainted with more; I only contend, that it is not conſidered as requiſite for obtaining their ſurgical diploma.

INSTANCES, it is ſaid, have occurred during the late war, where Surgeons were raiſed to the office of Phyſicians by the mere word of a Commander in Chief. We ſhall not ſay that the knowledge of ſuch were not ſufficient for the office to which they were elevated; but we may be allowed to remind even commanders, that it is an unwarrantable ſtep in them. It is an encroachment on the regular bred Phyſician, and on the prerogative of the Univerſity.

verſity. It may likewiſe prove a diſcouragement from ſtudy, and examinations. As ſoon as ſuch proceedings get abroad, and when it is found, that the loweſt practitioners ſtand a chance to be advanced to the priviliges of the Phyſician, and enjoy without ſtudy thoſe emoluments he ought to receive, Candidates for the army will ſpare themſelves the trouble of tedious preparations for examinations, as well as the expence of a Doctor's degree: they will remain contented with a Surgeon's diploma; perhaps, even never apply for this.

Suppose Generals were never to make ſuch appointments without a recommendation, yet this is not enough; the perſon to be promoted ought to have the ſanction of an Univerſity, a lawfully inſtituted ſeminary of medical knowledge. A man may give univerſal ſatisfaction to officers by his manner of conducting himſelf; or he may ingratiate himſelf into the favour of thoſe that have power to ſerve him. If the promotion

motion he obtains, be in his own line, it is well; but when thoſe bounds are broke down, by an *ipſe dixit*, then it becomes a fault. A General has as much right to create a Biſhop, as he has to create a Phyſician, i. e. he can do neither; it is beyond his proper ſphere of action. It is juſt as abſurd as if the College of Phyſicians would pretend to create a General, who never was bred to war, and poſſeſs neither practical knowledge in the art, nor lawful authority for ſuch proceeding.

SURELY he would never be acknowledged among general officers as one, though the Univerſity ſhould meet and in the moſt ſolemn manner proclaim him ſuch. It is juſt the ſame with a General who dubs a man a Phyſician, if an Univerſity, who have properly the power of ſuch creation, never conferred on him this dignity; he may indeed give him the emolument, this he has in his power to do; but I will ſubmit it even to himſelf, if this be acting with propriety,

and for the welfare of his Sovereign's ſervice. His Sovereign has delegated to him this power of commiſſioning medical people to relieve the complaints of the ſoldiery; not with the expectation that it is to be abuſed by the introduction of irregular perſons. Such a ſtation ought to be conſidered as the ſecond in military life. When things go on in this manner, it is no wonder if Generals find their armies compoſed of feeble and unhealthy ſoldiers; or to uſe the words of Milton, "If they ſee the ſoldiers ſhed away from about their officers as ſick feathers, though never ſo often ſupplied."

But to return; to recommend ſtudy, and to endeavour to point out the advantages of improving the mind, to ſuch as have the practice of medicine in view, and more eſpecially, to regimental practitioners, who are chiefly the objects of theſe pages, cannot, I think, be cenſurable; and I hope my endeavours towards this end, however

however imperfect, ſhould they not deſerve applauſe, will, at leaſt, be allowed to paſs without the accuſation of preſumption, or the odium of arrogance, and ſelf-importance.

In diſcharging a truſt of ſuch magnitude, of ſuch conſequence to the public welfare, as the practice of medicine, it becomes a duty of the firſt kind to prepare ourſelves with care and diligence, and to call to our aſſiſtance every aid we are able to procure. Nor, perhaps, is it beneath the wiſeſt, the moſt informed, and experienced of the profeſſion, to reflect, and that ſeriouſly, on the following ſentiment, viz. that, —" it is, often, not from any deficiency in the engine when we fail, but from an error in us who wield it."—Or, in the words of Pope,—that,

———" if vain our toil,
The fault lies in the culture, not the ſoil."

WERE we to conſider a knowledge of the ſciences only, in the light of making us more happy, independent of their aſſiſting us in medical reſearches, this ought to be an inducement to cultivate them. For happineſs is what every one has in view, however different the ways may lead, through which it is ſought; and there is a pleaſure in purſuing ſcience, in ſearching for knowledge, not leſs to the mind engaged therein, though at firſt leſs apparent, than in the flowery and inviting paths of frivolous amuſement, and diſſipation; a pleaſure too, that affords ſatisfaction on reflection, when thoſe years are almoſt full, that requires us "to be numbered with the dead," which the other cannot beſtow. Our various enjoyments through life are heightened by ſcience.—"Science renders life leſs animal, leſs confined to the duſt we tread on."—And ſo great is the ſatisfaction of acquiring knowledge, "that, (ſo we are told) Archemedes abſorbed by this pleaſure, did not even perceive the ſoldier who came to plunge

plunge into his breaſt, the ſword which ought to have protected him."

I SHALL conclude the foregoing remarks with the ſentiments of a diſtinguiſhed author *, on the ſuperiority of the perſon whoſe mind is improved and enlightened by literature, in what ſphere of life ſo ever he be, over him who remains in the darkneſs of ignorance. After telling us, that the waſte of time is a very calculable loſs, but that depravation of mind is a waſte of a much higher denomination, he goes on— "the votary of ſtudy, or the enthuſiaſt of fancy, *may* incur the firſt, but the latter will be ſuffered chiefly by him, whom ignorance, or want of imagination has left to the groſsneſs of mere ſenſual enjoyments. In this, as in other reſpects, the love of letters is friendly to ſober manners, and

* Vid. Lounger, Vol. III No. 100.

virtuous

virtuous conduct, which in every profeſſion is the road to ſucceſs and to reſpect.

"To the improvement of our faculties, as well as our principles, the love of letters appears to be favourable.—They give room for the exerciſe of that diſcernment, that compariſon of objects, that diſtinction of cauſes, which is to exerciſe the ſkill of the Phyſician; to guide the ſpeculations of the merchant; and to prompt the arguments of the lawyer; and though ſome profeſſions employ but very few faculties of the mind, yet there is ſcarce *any branch of buſineſs* in which a man who can think, will not excell him who can only labour. We ſhall accordingly find, in many departments where learned information ſeemed of all qualities the leaſt neceſſary, that thoſe who poſſeſſed it in a degree above their fellows, have found from that very circumſtance, the road to eminence and to wealth.

"He who has mixed general knowledge with profeſſional ſkill, and literary amuſement with profeſſional labour will have ſome ſtock wherewith to ſupport him in idleneſs, ſome ſpring for the mind when unbent from buſineſs, ſome employment for thoſe hours which retirement or ſolitude has left vacant and unoccupied."

A SHORT

A

SHORT DESCRIPTION

OF THE

INFLUENZA,

WITH ITS DISTINCTION

AND

METHOD OF CURE.

PREFACE.

THE following ſhort Eſſay on the Influenza was written during the laſt epidemic attack of the diſeaſe, and publiſhed in June, 1782, before it had entirely diſappeared in the neighbourhood where the remarks were made. It is republiſhed here as connected in ſome meaſure with my obſervations on the medical practice of regiments.

A SHORT

A

SHORT DESCRIPTION, &c.

THE inclemency and backwardneſs of the ſeaſon * have been remarked by ſome of the oldeſt people alive, to be the greateſt in their remembrance. The ſpring proved exceedingly cold, which checked vegetation; and in ſeveral parts of Scotland, numbers of cattle periſhed for want, as neither fodder nor graſs could be procured for money; many were killed for the ſame reaſon. Our accounts from Plymouth are nearly ſimilar.

* Spring, 1782.

A GENTLEMAN, who took for ſeveral months paſt an exact account of the ſtate of the weather, aſſures us that he found the thermometer ſtand one degree lower on the 22d of May, than it did on the 22d of the preceding December; and that on Chriſtmas-day laſt, and Whitſunday, it ſtood preciſely at the ſame height. For three months we have ſcarcely enjoyed a ſingle day, without more or leſs rain.

ABOUT three weeks ago there was a dreadful thunder ſtorm; the morning ſhone bright, and the day warm till about 12, when it lowered on a ſudden. The lightning and thunder were remarkable, accompanied with a ſhower of large hail ſtones. I took up ſome as they fell, examined their ſize, and am perſuaded they would have meaſured upwards of half an inch round; the thunder laſted more than half an hour, and the hail continued to fall about a quarter of an hour or twenty minutes. It did not, however, ſpread to any

for

great diſtance, for five miles from this no hail was perceived.

Since this it has thundered frequently, but the moſt remarkable was about the 24th of May. It began in the evening, a little before ſun-ſet, and continued at leaſt for two hours. The thunder at this place, however, was leſs remarkable than the lightning; I ſtood with a gentleman here to obſerve it nearly the whole time of its continuance. Preceding the thunder, it was a dead calm, and the day likewiſe by far the warmeſt we had experienced for a length of time before.

There was ſomething awfully beautiful in the lightning. It did not appear in flaſhes in general, but in large balls, one rolling after another over the heavens northward of us, and now and then daſhing one againſt another, driving off large ſparks, producing a great and ſudden glance, which enlightned the ſtreet of the village for an inſtant,

inſtant, as if the ſun had ſhone forth; yet the thunder was at a conſiderable diſtance, as we could eaſily aſcertain by the interval between the lightning and the peal. From this we concluded ourſelves in no danger, and ſtood with the leſs concern to view the uncommon appearance it produced.

We preſaged, that over the places where the fire balls paſt, there muſt be damage ſuſtained, and almoſt the next poſt confirmed our ſuſpicions; for not only houſes were burned, but ſeveral perſons loſt their lives, and many trees were ſhattered to pieces.

Nearly about the ſame time the Influenza made its appearance in London, and the country round. It ſpread in a few days with great rapidity, inſomuch, that a phyſician of extenſive practice in the city, is ſaid to have viſited no leſs than one hundred and ſeven patients labouring under it in one day.

At

At St. Alban's it ſoon became prevalent; the ſoldiers that lay there ſeemed to be the firſt victims of its fury. Out of three companies quartered in that town, ſcarcely a ſingle man was fit to do duty—the officers ſuffered in like proportion; for one only eſcaped the complaint.

In the neighbouring towns it raged with no leſs ſeverity. I have ſeen ſeven in one family, nine in another, five in a third, and in a fourth, eleven ſeized with it We had accounts, that in Sir Patrick Blake's family, fifteen laboured under it; and in the Duke of Marlborough's, no fewer than twenty-ſeven.

This is allowed to be one of the wideſt ſpreading epidemics in the whole catalogue of diſeaſes. It is not confined to thoſe on land; at ſea it rages with equal fury. The accounts we have from the fleets, confirm this remark. It is ſaid, that 400 of one ſhip's company, and 300 of another, came

came lately on ſhore ill of it; nor does it ſeem to be confined to the human ſpecies; for it is ſaid horſes are in like manner ſufferers, as well as ſheep; but this I will not give for a fact.

In my journies to viſit patients, I have obſerved both horſes and ſheep cough frequently; I think others have obſerved the ſame in former ſimilar epidemics; how far it was connected with it, I dare not ſay.

The laſt time it made its appearance is yet freſh in the memory of every one; it is but a few years ago; at that time it ſpread in a ſhort period over all Europe; I am told it has at preſent reached the Continent; and there is ſome reaſon to believe, from the experience we have in the diſeaſe, it will viſit many parts before it ceaſes *.

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* Since this was written, there are accounts of its having made its appearance at Stockholm and other parts of the Continent, where it rages with violence.

SYMPTOMS.

The firſt ſymptoms are, a great cough, with ſtraitneſs about the breaſt, and conſiderable dyſpnoea. The patients generally complain, as if they had ſomething like a ball in their throat, about the head of the ſternum; to this they attribute the want of free reſpiration; a coryza, or running at the noſe, always takes place, thin and acrid, excoriating the upper lip, and vellicating the membrana ſneideriana, rendering the inſide of the noſe extremely painful: this is always accompanied with a violent ſneezing, which adds very much to the pain of the head. In general, among my patients, I found a ſoreneſs over the eyes, chiefly about the brows, which they ſaid was ſeated in the bone, and rendered them ſtiff and painful to be opened, nor when open could they bear a ſtrong light. A rheum alſo diſtilled from them, not un-

like what we obſerve take place in the meaſles.

The head is alſo in this complaint much affected, eſpecially the fore part, in the courſe of the frontal ſinuſes. This pain is much aggravated by coughing; at the ſame time are felt univerſal pains over the whole body, ſuch as we often meet with in continued fevers; there is generally a febricula, which is known by the alternate heat and cold the patients feel; and in ſome caſes the pulſe is evidently accelerated, and the fever running very high; but in the greater number of thoſe that came under my care, this did not happen.

In many I could diſtinguiſh very little fever, by what remarks I was able to make on the pulſe: in others, nevertheleſs, it was ſufficiently evident, and many were weak thereby and faint. There is always ſome thirſt accompanying it. In my own caſe, and

and in all thoſe I viſited, the pain on attempting to cough was felt about the head of the ſternum, reaching as far down as its middle, but not ſpreading far on either ſide. I found very few who pointed at the ſeat of the pain as placed near the cartilago enſiformis. From this it appears to be entirely confined to the trachea, and its firſt ramifications; neither the pleura covering the lungs, nor their proper coat having much part in the affection.

In ſome who were valetudinarians, whoſe lungs were previouſly in an unſound ſtate; or where there was an hereditary taint, laying an eaſy foundation for an affection, the caſe was otherwiſe. Theſe were ſeized in a more violent manner, and the complaint here put on a more dangerous appearance.

The pain in the breaſt is ſeldom felt but on attempting to cough. Then it re-

ſembles the pricking of a thouſand pins, almoſt totally checking the effort.

The throat and mouth burns with heat, with an uncommon ſmarting pain all over the fauces, and behind the velum pendulum palati. The tongue and fauces become dry, and conſiderably parched. In two patients this was remarkably the caſe. Some bled at the noſe; and one patient had abſceſſes formed in both ears, which burſt and have continued diſcharging for ſome time paſt.

As the complaint abates, the pain in the breaſt ceaſes; firſt gradually leaving the ſternum and neighbouring parts, but continues fixed ſome time longer about its head, with a duller and leſs acute ſenſation on coughing, which very little now, if at all, impedes that effort of nature to free herſelf from ſomething irritating.

In this ſtage, expectoration becomes more eaſy, the cough leſs ſevere, *i. e.* leſs painful, as was already mentioned, but not leſs frequent; the fit not ceaſing till a quantity of mucus be pumped up. Though a diarrhæa be not a characteriſtic ſymptom, nor frequently met with, yet I have ſeen ſome few caſes where it was conjoined. In ſome of theſe, however, it exiſted before the Influenza made its appearance.

The duration of this diſeaſe, in general, is not long. I have ſeen none very ill above a week: many not more than three or four days. Others, however, have been leſs mildly dealt with, and have laboured under it for upwards of fourteen. It generally leaves the body weak and debile, and for a conſiderable time unfit for much exerciſe.

A gentleman who left London a few days ago, told me, as he paſſed through the ſtreets pretty early in the morning, that

that he obſerved many of thoſe who cry things for ſale, leaning their heads againſt the walls of the houſes, and in this ſituation crying their goods; not being able to ſupport themſelves upright.

The ſeat of the complaint ſeems, from the hiſtory we have given of its ſymptoms, to be entirely placed in the mucous membrane of the trachea, ſneiderian membrane, and that lining the frontal ſinuſes. That there is an inflammation induced in thoſe, muſt alſo be obvious, and this greater or leſs, according to the violence of the diſeaſe, and habit of the patient.

DIAGNOSTIC.

It is no difficult taſk to diſtinguiſh it from an inflammation of the lungs, and pleura. The ſtate of the pulſe, which in this complaint is for the moſt part ſoft and feeble, in the pleura generally full and hard, would of itſelf ſuffice for this purpoſe; but

but the coryza, which never takes place in the pleuriſy, will be ſtill a farther mark: nor are there found in pleuriſy thoſe wandering pains over the body, ſo univerſal in this diſeaſe. It has, indeed, a nearer reſemblance and connection with the catarrh. In both we often meet with coryza, pains in the head, and over the body; but the ſporadic nature of the one, appearing only in thoſe perſons who have been expoſed in a particular manner to cold, and the epidemic nature of the other, attacking almoſt every one indiſcriminately, without diſtinction of ſex, age, or ſituation, will direct us in our diagnoſtic. Perhaps, we might add a previous conſtitution of the air, and ſtate of the weather, at leaſt, in giving a prediſpoſition to it. A man who had a compound fracture of the thigh, and had been confined to bed by it for upwards of four weeks before the diſeaſe made its appearance, was ſeized with it, and ſuffered equally with the reſt of the family. This is a ſtrong proof of its epidemic and contagious

tagious nature. But the chief diagnoſtic mark is its ariſing from a ſpecific contagion inducing a great degree of debility.

It has been ſuppoſed by ſome that pneumonic inflammation has been contagious from its appearing as an epidemic; but I am of opinion, we may, without great difficulty, diſtinguiſh between ſuch an epidemic, if it ever does become ſo general as to put on the appearance of one, and the Influenza, from the difference both in the extent and rapidity of the ſpreading of this beyond the other, not to mention ſeveral other obvious diſtinctions to diſcriminate them.

CURE.

When the Influenza is ſkilfully treated, it ſeldom proves fatal *; on the other hand,

* I have heard only of one perſon who died of it, ſince its preſent commencement: he was previouſly in a bad ſtate of health.

if

if unſkilfully handled or entirely neglected, it may lay the foundation for conſumptions. The inflammation may ſpread; may penetrate into the ſubſtance of the lungs, abſceſſes may be formed; the conſequence of which muſt be abſorption: the maſs of fluids in this manner will be contaminated, and the patient at length ſink under a confirmed hectic.

With reſpect to the method to be purſued; in this part of the country veneſection is unſafe, unleſs in plethoric and robuſt habits. It yields in moſt caſes to the other modes of removing inflammation. We are to adminiſter plenty of thin, diluting liquors, ſuch as barley-water with a little nitre, or acidulated with orange or lemon juice: ſage tea, ground-ivy tea, balm tea, orange whey, weak negus made with oranges or tamarinds, lemonade ſweetened with honey. What ever one of theſe we chuſe for drink, it ſhould be uſed ſomewhat warm. The relaxing powers of ſuch

liquids are greater when ſubtepid than either altogether cold or when made pretty hot. It ſhould be a conſtant rule to ſip of theſe drinks every now and then, whether thirſt requires it or not. Our drinks may be ſweetened to our taſte with honey, ſucc. glycerrh. or liquorice-root, boiled in it.

Gentle diaphoretics ought not to be omitted to promote a free preſpiration, on which a great part of the cure will depend. For this purpoſe ſp. minderer. with a few drops of vin. antim. and a few of L. Laud. will anſwer. If our patients are not ſo bad as to be confined to bed, we ſhould at leaſt caution them to ſtay within doors; but it would be better ſtill to adviſe them to keep in bed to encourage perſpiration. The feet ſhould be every night bathed in warm water. This will not only bring the determination of the blood from the bronchiæ, and of courſe relieve them, but a conſiderable abſorption of the water will be made, and the blood even in this manner;

ner, if there be any degree of fizineſs exiſting in it, diluted, and the coheſion of its gluten looſened. When the cough is diſtreſſing and keeps the patient from reſt, an opiate muſt be adminiſtered. I give them with great ſucceſs: for admit there be preſent a conſiderable ſhare of inflammation, yet the irritation occaſioned by the cough more than over-ballances the heating qualities of the opiate; nay, a night's reſt from coughing, wonderfully promotes expectoration. It is needleſs to mention mucilages, after what was ſaid above on drinks. Solutions of gum arabic will prove here very ſerviceable. Coſtiveneſs is to be obviated by ſome of the milder laxatives; perhaps cream of tartar made into an electuary with honey may ſuperſede all others; for the ſimpler our preſcriptions are, ſo much the better. A multiplicity of medicines only breeds commotion and interrupts the action of one another. We may relieve the pain of the throat, by ordering the ſteams of warm water to be inhaled. This may be medi-

cated with herbs as we may judge proper, though the warm water alone will anſwer nearly as well. If proper inhalers, ſuch as deſcribed by Mr. Mudge, be not convenient, a tea-pot, wrapping the pipe round with a handkerchief or towel, forming a ſort of tube, may anſwer as a ſubſtitute.

The food ſhould be light; rice or bread pudding; thin broths, ſago; to a pint of which, a glaſs of white wine may be added. Panado, to which likewiſe, if our patient be not very feveriſh, we may add a little wine.

If the appetite be not much impaired, which I have ſometimes found the caſe, and the patient ardently wiſhes to indulge in ſome freſh meat, it ſhould be boiled. Roaſt meat heats too much, as having its fat or gravy, in a great meaſure, retained in it by the conſtant rotation it undergoes in dreſſing.

As

As vegetables are laxative, and do not produce ſo much chyle as fleſh meat to diſturb the animal œconomy, we may allow our patients ſuch of the olera as they chuſe.

I SELDOM find it neceſſary either to bleed or bliſter *; nor have I heard of any caſes ſo treated in a circuit of between twenty and thirty miles round this place, ſave one Lady at St. Alban's, where the Surgeon thought it neceſſary, and whoſe blood indeed was conſiderably inflamed, as appeared by the coagulable lymph ſeparated on its ſurface. I have been informed, however, that in London they both bleed and bliſter with advantage. In ſome parts of the city, however, I am authorized to

* One Surgeon in this town tells me, he has applied bliſters in a few caſes where the difficulty of breathing was great, bending the body forward, and threatening (he ſaid) ſuffocation.

ſay, bleeding did not anſwer. Dr. Rogers, Phyſician to the Finſbury Diſpenſary, Clerkenwell, whoſe opportunity of ſeeing the diſeaſe has been extenſive both in his public Diſpenſary and private practice, informs me, that in place of finding it accompanied in general with much inflammation, it rather verges towards the typhus type. In one caſe this was remarkable; ſo that he was obliged to adminiſter the bark in various forms. This patient was a Lady, and of a delicate habit.

My friend Dr. Willan likewiſe, Phyſician to another Diſpenſary in the city, ſaw a caſe where a few ounces only of blood were taken away; the conſequence of which was a depreſſion of ſpirits and lowneſs of pulſe, where the beats could with difficulty be diſtinguiſhed for three days after, notwithſtanding endeavours to raiſe it.

Vomits too, in the beginning, have been ſaid to have very good effects; but in

this country I have not ſeen a ſingle emetic ventured on; and have heard only of two or three inſtances of it. They create great irritability; for this reaſon I ſhould be afraid to venture on them. It is true, they open the pores of the ſurface, and relieve obſtructed perſpiration; but this may be done with more ſafety without them.

With reſpect to bleeding; the nature of this place and ſeaſon, ſufficiently caution againſt it. The country is woody; the leaves of the trees now pretty fully opened; hence they retain a greater quantity of moiſture, and from their ſhade impede the free circulation of the air; the rains for months paſt almoſt continual, and of courſe much ſtagnating water on the ground. A conſtant exhalation of vapour is daily more or leſs taking place; by this means the atmoſphere is loaded with moiſture: and as the ſummer is now advancing, when the ſun ſhines forth, it is with vigour, which raiſes the moiſture ſtill more.

This

This variableneſs of weather, often in the ſame day, is ſufficient to relax the moſt robuſt fibre, and induce debility in the ſtrongeſt habits.

That this is the caſe is evident, from the number of intermittent fevers round this neighbourhood. Of numbers that dwell along the banks of a ſmall rivulet that waters this, and ſeveral other villages in the courſe of twelve or fourteen miles, fevers of this type are to be found at preſent almoſt in every family. I have ſeen children under them of ſix years of age, and one ſo young as two; nor is this, as I am informed, a rare occurrence. The typhus has likewiſe ſhowed itſelf in ſeveral inſtances of late in this place; all theſe plainly point at debility; for theſe reaſons, I have not bled in a ſingle caſe, excepting in one, of the many I ſaw under the preſent epidemic; nor indeed does the ſtate

of

the inflammation in the leaſt warrant its propriety *.

In our practice among the poor, who are deprived of thoſe conveniencies to be met with in genteeler life, we may fully anſwer our purpoſes by the Sp. Minder. & Vin. Antim. as mentioned already, giving plenty of milk poſſet, made either with butter-milk, or in its ſtead good vinegar.

Mucilaginous drinks may be made cheap, and good enough with Rad. Glycerrh. Spaniſh juice, decoctions of common mallows, lintſeed tea, decoction of bran, made palatable with honey, or ſuch like, the expence of which they may eaſily bear.

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* Since this was written, a gentleman of this place tells me, he has bled in ſome few caſes with advantage; yet I examined the blood of one of his patients, and it confirmed what I advanced. The patient had inſiſted, however, on being bled.

Fifteen grains of nitre may be added to any of theſe, three times a day.

WHETHER we practice among the poor or otherwiſe, ſtrong ſudorifics ſhould be avoided. Hence Pulv. Dover. Camphor, and ſuch like, are improper; theſe both heat and irritate too much. For the ſame reaſon we ſhould avoid all the warm Alexipharmics. Some order to the poor, treacle poſſet, made with treacle and ale, and oftentimes adding butter. This ſurely is an unwarrantable practice; it muſt throw the patient into a copious ſweat, and from ſuch relaxation of the perſpirable pores, he is in ten times the greater danger of catching a freſh cold. Lubricating and ſoftening linctuſes, will avail much in taking off the tickling cough, and allowing the mucus to thicken, theſe may be compoſed of Conſerv. Cynoſbat. ol. Amygdolar. Mucilage of Gum Arabic, and Paregoric Elixir, or Syr. Papaveris. Some add to this a few drops of Elix. Vitrioli: but I would object

ject to this, as tending, perhaps, to check perſpiration.

A VERY uſeful and cheap Linctus may be compoſed of Mucilag: Sem. Lin. Syr. Moror. and a few drops of Sp. Nitr. Dulc.

SPERMACETI mixtures likewiſe, if it is judged neceſſary, may be given; but the Linctus ſeems to anſwer better.

BY ſuch means as thoſe we may reaſonably hope to obviate all the bad effects of the Influenza, without the loſs of blood in moſt inſtances, and reſtore our patients to their former health and vigour. Let us remember the proverb, *ne ſanguinis humani prodigus*, at leaſt before we uſe the lancet, let us weigh well the ſymptom that ſeems to indicate it.

As the Author's intention in this little tract is rather to appear uſeful than elegant; he has therefore been at little pains with regard

gard to diction, or ornament. To write plain, ſo as to be rightly underſtood, is all he aims at. The humane reader will, he is perſuaded, eaſily forgive errors of that nature, in a ſketch written in haſte, and intended for immediate uſe; and as he has conſulted no author in drawing it up, nor opened a ſingle book on the ſubject, his deſcription is to be conſidered as ſolely made from his own obſervations, ſince the preſent commencement of the diſeaſe: for this reaſon he hopes he is not cenſurable, if all its variety of ſymptoms be not enumerated.

The young practitioner, who has not had an opportunity of ſeeing the diſeaſe before, as well as the patient, may perhaps reap ſome advantage from the ſhort and imperfect account given of it here. And if this end be obtained, he ſhall be the leſs anxious, on the preſent occaſion, reſpecting literary reputation.

Luton, Bedfordſhire, May 28, 1782.

THE END.

ERRATA.

Dedication. Vol. I. p. 1. l. 4. after *have* add *granted*, l. 9. after *in general*, add *I am ſtrongly induced*. l. ditto, after *both* add *by*. l. 10, 11, for *ſtrongly unite to call for*, read *to make*.

VOL. II.

Ch. xi. p. 1. l. 2. from bottom, for (,) after *alone* read (;) Page 8. l. 5. for (,) after *beſides* read (;) Ditto l. 3. from bottom, after *Surgeon* add (,). Ch. xii. p. 49. l. laſt, after *up* add (,) p. 75. l. 5. after *party* dele (,) p. 87. l. 1. for *law*, read *power*. p. do. l. 12. after *ignominous*, for (;) read (.) Ch. xiii. p. 94. l. 9. for *effect*, read *affect*. p. do. l. 7. from bottom, for *minutæ* read *minutiæ*. p. 105. in the note, for vol. 1. read vol. 8. p. 108. l. 15. for *ounce*, read *ounces*. Ch. xiv. p. 162. l. 13. dele *not*. p. do. l. 18. for (;) read (?) Ch. xv. p. 192. l. 5. from bottom, for *indiſpenſably*, read *indiſpenſable*. p. 201. l. 1. for *hire*, read *here*. p. 208. l. 12. for *the army cuſtoms and regulations*, read *the cuſtoms and regulations of the army*. p. 225. l. 8. for *legs*, read *leg*. Ch. xvi. p. 239. l. 2. from bottom, after *intermitents*, dele (,) p. 240. l. 11. after *on*, add *an*. Ch. xvii. p. 254. l. 4. before *Phyſicians*, add (") p. 259. l. 5. from bottom, for *bone*, read *bones*. p. 276. l. 2. for *inequalities*, read *quantities*. Do. l. 9. after *practitioners*, add (,) Do. l. do. after *years*, dele (,) p. 300. l. 2. from bottom, after *here*, dele (,) p. 321. l. 10. for *was*, read *were*.